

Timothy McDonald and Fadi Zayat

The Internet as a marketing medium

An introduction to Search Engine Optimization

Bachelor's Thesis
Business Management


November 2009



MIKKELIN AMMATTIKORKEAKOULU

Mikkeli University of Applied Sciences

DESCRIPTION

 <p>MIKKELIN AMMATTIKORKEAKOULU Mikkeli University of Applied Sciences</p>		Date of the bachelor's thesis 30 November 2009	
Author(s) Timothy McDonald and Fadi Zayat		Degree programme and option Business Management	
Name of the bachelor's thesis The Internet as a marketing medium – An introduction to Search Engine Optimization			
Abstract <p>Today search engines are reaching enormous audiences; therefore, there are business motives to gain top positions for popular keywords. A top position on Google search engine can potentially lead thousands of new prospects to a company via its website. Search engines aim to deliver the most relevant websites; however, these results can be influenced by altering the factors that determine a website's position on search engine results pages (SERPs). This phenomenon of targeting top positions in search is now known as Search Engine Optimization (SEO).</p> <p>This study was a research on SEO and its position in the Internet marketing medium. The purpose was to discover some of the underlying factors that affect SEO and to identify, select and analyze suitable keywords for the host company, as well as to provide informed analyses and recommendations for their SEO marketing efforts.</p> <p>Data collection was performed by using quantitative research methods to collect information, explore keywords and understand the competition involved in gaining top positions on SERPs. Information on important factors of SEO was gathered from a previous study to generate a research method. This method was labelled as SERP Matrix, which is a detailed list of criteria that is used to analyze the competition for selected keywords. Each SERP Matrix displays the results of the keyword, in a table which is easy to measure and compare.</p> <p>This research provided the host company with three viable keyword possibilities, to optimize on Google. This study implied that having an appreciation to SEO can be an asset to any company looking to market online.</p>			
Subject headings, (keywords) Marketing, Internet, Search Engine Optimization, Search Engine Marketing, Online marketing, Marketing Medium			
Pages 64 pages + Appendix (6 pages)		Language English	
URN 			
Remarks, notes on appendices 			
Tutor Matti Koivisto		Employer of the bachelor's thesis Funnelwebs	

CONTENTS

1	INTRODUCTION	1
1.1	Aim of the study	2
1.2	Literature	3
1.3	Thesis structure.....	4
2	MARKETING AND THE INTERNET	5
2.1	Evolution of marketing concepts	6
2.2	The effect of the Internet on business	9
2.3	The Internet as a marketing medium.....	13
2.4	Business websites.....	15
3	SEARCH ENGINE MARKETING	18
3.1	Internet usage statistics.....	24
3.2	Significance of search	25
3.3	Search Engines.....	27
3.4	Search engine optimization as a marketing tool.....	29
3.5	Advantages of search engine optimization.....	30
3.6	Search engine optimization ethics	31
4	THE RESEARCH	33
4.1	Research methods and procedure of study	34
4.2	Important factors in search engine optimization	36
5	KEYWORD RESEARCH.....	40
5.1	Identify and select potential keywords.....	40
5.1.1	SERP Matrices	43
5.1.2	SERP Matrix Steps.....	43
5.2	Keyword One: kotisivut	46
5.3	Keyword Two: edulliset kotisivut.....	49
5.4	Keyword Three: kotisivut yritykselle	51
5.5	Keyword Recommendations	52
6	CONCLUSION.....	54
	BIBLIOGRAPHY	57

APPENDIX	65
----------------	----

LIST OF FIGURES

Figure 1. North American business search engine marketing expenditures to reach \$26b in 2013	19
Figure 2. Marketing vehicles respondents cited as among their top three by return on investment for advertising agencies in North America	20
Figure 3. Screenshot of Google.fi for the keyword <i>search engine optimization</i>	22
Figure 4. Click heat map, user behaviour showing where most users click on the search results page	23
Figure 5. Online shoppers during the past three months in 2001 - 2008, per cent of population aged 16-74 years.....	25
Figure 6. Comparison between the domain age and PageRank of funnelwebs.com/fi and kotisivuni.org.....	49
Figure 7. Comparison of the number of searches and potential new visitors for the selected three keywords.....	53

LIST OF TABLES

Table 1. Ten keyword synonyms for the <i>keyword kotisivut</i>	41
Table 2. Title competition of each potential keyword	41
Table 3. Removal of any keywords that did not convey the character of a potential website buyer	42
Table 4. Three suitable keywords for Funnelwebs to consider for search engine optimization	43
Table 5. SERP Matrix of the first 10 web pages listed for the keyword <i>kotisivut</i> on Google	46
Table 6. SERP Matrix and keyword comparison for the keyword <i>kotisivut</i> on Google	47
Table 7. SERP Matrix of the first 10 web pages listed for the keyword <i>edulliset kotisivut</i> on Google	50
Table 8. SERP Matrix and keyword comparison for the keyword <i>edulliset kotisivut</i> on Google	50

Table 9. SERP Matrix of the first 10 web pages listed for the keyword <i>kotisivut</i> <i>yritykselle</i> on Google.....	51
Table 10. SERP Matrix and Keyword Comparison for the keyword <i>kotisivut</i> <i>yritykselle</i> on Google.....	52

1 INTRODUCTION

In the 21st century, the Internet has developed into a vast and dynamically structured network. It has made information on all subjects and topics available for all users to find. The Internet has become so large that organizing all of its information would be practically impossible. One of the primary purposes of people using the Internet is to find information (Internet Trends 2009). Due to the Internet's immense volume, finding relevant web pages without the assistance of a search engine would be extremely difficult. The Internet had to be indexed and placed in some form of list, in order to enable the user to locate the information that (s)he is seeking. This need to find information online brought forth the popularity of search engines, namely Google, Yahoo and MS Live (Bing). Search engines have become gateways that list web pages according to the relevance of the keywords entered into the search engine by the user. Because search engines are an easy and practical solution to finding information online, they have become exceedingly popular.

Search engines today reach enormous audiences. Consequently there are various commercial and political motives involved in gaining top positions, in the results of the search engines. For example, approximately 18 000 people each day search on Google for the keyword *buy shoes* (Google Adwords Keyword Tool, 2009); therefore, it would be of great interest to any shoe company to be the first listed web page for that particular keyword. A top position on Google for a keyword with as many searches as 18 000 per day, could potentially lead thousands of new prospects to the shoe company via its website. Although the search engines have been designed to bring forth the most relevant websites to the keywords, these results can be influenced through the understanding of how search engines list the results, in order of rank and relevance. This phenomenon has developed into a new industry called Search Engine Optimization (SEO). SEO's main function is to influence search engine results.

Due to the demand of companies aiming to attract more visitors to their websites, many SEO service companies have emerged. The SEO service companies offer services which promise to improve a website's position and visibility in a search engine. The higher the website ranks in the results for any keyword, the more visitors it is likely to receive. Generally, the more popular the keyword is, the more challenging it is to obtain a top position.

1.1 Aim of the study

The theoretical aim of this study is to find out how the Internet and search engines have affected marketing; as well as to understand the benefits of SEO and its potential as a marketing tool to reach new customers. This study sheds light on the concept of SEO and educates the reader on the significance of search engine marketing (SEM).

The practical aim of this study is based on researching keywords for Funnelwebs, a web design agency located in Helsinki, Finland. The research involved examining the type of keywords that are relevant to the web design industry. Funnelwebs offers web design and development services to businesses; therefore, the keywords had to signify a potential customer looking for web design services. The keywords were to be of high relevance. The research included identifying potential keywords which would drive more customers to Funnelwebs. The principal factors for achieving top positions in Google are also examined. Determining which keywords would be feasible to compete for was achieved in the research. The research used a previous study on the most important factors of SEO, as a backbone to devise the method for analyzing the keywords and the level of competition. Moreover it ultimately determined whether or not it would be feasible for Funnelwebs, to obtain a top position in Google for the selected keywords. This study also estimated the potential of optimizing for the keywords, by calculating how many daily visitors would be expected from a first position on Google. The research was carried out over a period of 5 months (May 2009 - September 2009).

This study will not cover the luring issues in SEO such as the spamming and manipulation of the search results through the use of unaccepted (black hat) methods. As in other industries, there are ways to manipulate results. In SEO, there are ways to manipulate the results through spamming (Gyöngyi, Z. et al. 2006, 439-450). With the network of spammers increasing, link exchange programs are set up and rankings are manipulated by the masses (Niu, Y. et al. 2006). There is a fine grey line between what is and what is not considered to be fair in SEO. In the Chapter SEO Ethics, the rules of SEO set out by Google are discussed and examined more carefully.

This study is not a practical or DIY (do-it-yourself) guide to SEO. In order to optimize a web page, there are many on-page and off-page procedures that need to be prepared, before a web page can be considered as optimized for a specific keyword. This study does not discuss these practical optimization techniques, such as how to build back links or how to include the keyword in a web page.

Google's sponsored results rankings may affect the click through rates of organic results; however this will not be discussed. Sponsored results are paid links at the top and on the right hand side of Google search results and are not viewed anywhere close to the number of views the organic results receive (Jansen, B. & Resnick M. 2005). Organic results are the normal results that are displayed when searching on Google. The top 5 organic search results receive on average over 80% of the clicks from Google search engine users (Thorsten, J. et al. 2004).

1.2 Literature

Since the beginning of the SEO era, there have been many books written about SEO. Thousands of articles have been published in attempt to market SEO methods and secrets. Most of these books and articles used in this study had relevant information. However, the fact that SEO was rarely discussed objectively in these books and journals, or the fact that it has yet to be introduced properly in academic marketing books, highlights its only recent increased awareness, its complexity, and its continuous evolution. Most of the materials available on SEO have been found from a large range of online sources. SEO is an evolving concept and has only lately been a very attractive topic with the latest information most conveniently found on the Internet.

The marketing literature used for this research has been mainly collected from various distinguished academic journals and books. *Introduction to Marketing* by John Frair was used to gain understanding on the basic themes and issues of marketing. *Framework for Marketing Management Third Edition* by Philip Kotler and Kevin Lane Keller provided an academic source to support the theories of the evolution of marketing and the development of the market. Richard Sandhusen's book on Marketing, *Marketing the Fourth Edition*, supported this study by its valuable in depth and detailed analysis of changes in marketing as well as compared the differences between tradi-

tional and Internet marketing. Sandhusen was able to masterfully combine the theoretical concepts to real case studies.

Principles of Internet Marketing by Hanson Ward provided the historical outline of marketing online as well as a comprehensive look at search engines and how marketing online has become standardized. *Ultimate guide to search engine optimization* written by an SEO expert, Jon Rognerud, tackled the concept of SEO and provided this research with a reference on how to optimize websites successfully. These books were some of the chosen literature for the research and their purpose was to serve as significant sources with sufficient, accepted and relevant information on marketing, the Internet and SEM.

1.3 Thesis structure

The study is organized into chapters and sections that are intended to deepen the understanding of the reader before the research is introduced and analyzed. The literature review includes how marketing has evolved over time, as well as how the Internet has become a massive marketing medium directed to potentially the whole world.

The study continues by discussing the effect of the Internet and websites to businesses and marketing. In Chapter 4, websites and their purpose are presented in order to prepare a platform for understanding the role of search engines, the importance of website visibility and the overall success of a website. In Chapter 6 the Google Search Engine and its development and complexity are examined. The study's focus on SEO is presented and explained technically as well as in the business context in Chapter 7. In Chapter 8 the reader is directed to the research that was carried out by developing the criteria for SEO.

The research investigates the keywords that were relevant to Funnelwebs. This also included researching the competition levels of the specific keywords chosen and finding the best possible keywords that Funnelwebs would be able to gain a top position for in Google. The final chapter concludes by giving insight to the outcomes of the research. Furthermore it provides an objective view of the research and factors on processes that could have been done differently and more efficiently.

2 MARKETING AND THE INTERNET

The Internet has been appreciated for its ability to make communication between all stakeholders much more convenient through the use of the website, email and other instant communication methods. Although it is clear that old traditional ways of communication still apply and should be used, the Internet is a force that should be realized and understood, as it has led to changes in the way business is done today.

Hanson Ward (2000, 2) compares the Internet's growth and popularity to that of the radio in the 1920s. Ward claims that change is always happening and that the Internet is not as radical as it presently seems to the traditionalist. Ward strongly reminds his readers that the radio captured the public's imagination at the time. Many commentators announced during the early years of the radio that it would indeed "revolutionize culture, education and commerce."

David (1991) discusses the revolution of electricity. The comparison explains how the public quickly adapted to the new technology and began to rely on it, even those who had first heavily favoured the traditional ways. Simon (1987) argues the same point for the research he did on the steam engine. Furthermore, Jardine (1999) believed the printing press had the same affect in the 15th Century, in terms of how revolutionary the technology was and its impact on different areas of human expansion, especially that of commerce.

Gordon (2000), on the other hand, argues that the Internet is not as revolutionary as earlier inventions as he observed that the Internet was more of a re-distributor of existing trade and not that of creating new business. Gordon focused his study on how the Internet was adding more to the costs of existing companies. He claims that while information is being provided to everyone at a cheaper and faster rate, the Internet in itself could not be viewed as a technical breakthrough such as electric power.

Supporting Gordon's theory, it could be shown how radio, once seen as a revolutionary innovation at the time, is now just another marketing medium; one of many different communication channels available. Therefore, to understand the full extent of the

Internet and the impact it has on society as a whole can only be appreciated and acknowledged after a time, when it is possible to look back at this current era.

Although this study focuses on how the Internet has become a powerful marketing medium and how online marketing is a new realization for many businesses, the existing marketing tools and mediums still play an important role in marketing. It should not be understood that Internet will radicalize the way companies market. Demonstrated and debated by marketing theorists, it is evident that new technology and marketing mediums are additions to the current available mediums. While companies may begin to focus more on the Internet and online marketing, the existing marketing mediums should not be lost in translation.

2.1 Evolution of marketing concepts

Businesses must identify how consumers behave in order to find out how to sell products and services to them. The most fundamental reason for a purchase done by a consumer is due to a need that the consumer seeks to fill. Through the power of purchasing a product or service, the consumer will in some way or form fulfil that need.

Needs are every individual's and societies' states of physical or mental deprivation. (Sandhusen, R. 2008, 3). In marketing, the importance lies in the know-how of being able to determine what product/service related needs are vital to each customer group. These wants and desires are then transformed into perceived needs by focusing on the need to be satisfied and bringing out the benefits of the products/services. Demands, in turn, are wants for specific products backed by the ability to pay for them. (Kotler, P. & Keller, K. 2006, 13). In order to market products/services, it is necessary to realize the intended target market's needs, wants, and demands.

Marketing has evolved throughout time into what is today commonly referred to as Holistic Marketing. Marketing philosophies have developed over the years and continue to develop into more dynamic concepts. Keith's (1960, 35-38) *The Marketing Revolution* was a dissection of the Pillsbury's Bury Company, where he divided the marketing methods used into four different eras. Many marketing books have used Keith's generalization of the evolution of marketing as the way things unfolded, most likely for its simplicity. They refer to marketing as a function, which had to be per-

formed in all exchange situations, rather than in the modern sense of a marketing-orientated management philosophy.

The first era was called the production era. Companies at that time, such as Pillsbury, concentrated on production because mechanical technology and raw material were becoming more available. It was known to begin during the Industrial Revolution, when major manufacturing centres and distribution networks were established. This was a time when decentralization occurred at the market stage and each family began specializing in a single profession. During this era, the division of labour was defined in families. Each family member was set to work on one activity of the profession. This division was fashioned in order to create routines and procedures that could help standardize how work was to be done and how products/services were to be produced. The production philosophy was based on the ideology that “a good product will sell itself”. (Sandhusen, R. 2008, 10 - 12).

The production era was followed by the sales era which concentrated on selling and advertising. The company, Pillsbury, tried to figure out what the customer's wants, needs and prejudices were. The sales philosophy, which replaced the production philosophy in the early 1920s, was known to develop due to the excess number of products that the market could not absorb. This created an emphasis on sales forces and advertising as a way to find new customers and persuade resistant ones to buy. The sales philosophy; however, did not yet involve communication with customers, as sales functions were only secondary to production. (Keith, R. 1960, 35-38).

The sales era led to the marketing era which concentrated on areas such research & development (R&D), advertising control, budgets and brands. Keith (1960, 35-38) explains his marketing theory as an understanding of how each era had some new revolutionary phase, with which the focus changed. The marketing philosophy emphasized a two way communication in search of consumer needs. This philosophy focused on developing products and services which would satisfy the customer's needs. The company became unified in terms of departments; the focus was on the company as a whole and each department was responsible to communicate with the other departments. (Sandhusen, R. 2008, 13).

The fourth era, which is known as the holistic marketing concept, is generally associated as today's current philosophy. It is identified as the "everything matters philosophy" and is comprised of the following concepts: internal, integrated, socially responsible and relationship. (Kotler, P. & Keller, K. 2006, 8).

Internal marketing is focused on ensuring that everyone in the organization follows the proper marketing principles. This requires managers to have the skills and knowledge to select, educate and lead their employees within the organization. Internal marketing is concerned with building long term success and having long term relationships with clients. Communication, motivation, and feedback are some of the factors that are noted as good practices of internal marketing. (Kotler, P. & Keller, K. 2006, 11).

Integrated marketing corresponds to the development of marketing activities and programs that aid communication and deliver value to consumerism. Integrated marketing is generally the use and specification of the marketing mix, the 4 Ps which include: product, price, place, and promotion. (Kotler, P. & Keller, K. 2006, 9). The marketing mix describes the strategy of a product's position in the marketplace. This version of the marketing mix was invented in 1948 by James Culliton, who stated that a marketing strategy should be a result of something resembling to a recipe. E. Jerome McCarthy, who became a famous marketer, proposed the 4 P's classification in 1960. The 4 Ps model has ever since been widely used by all marketers (Frain, J. 1999, 61). Robert Lauterborn later developed the integrated marketing mix by suggesting that there should be the corresponding 4 C's to the 4 P's. The 4 Cs model includes customer solution (product), customer cost (price), convenience (place) and communication (promotion) (Kotler, P. & Keller, K. 2006, 26).

Societal marketing philosophy is focused on providing desired satisfactions to consumers in ways that are socially responsible. This includes having a broader understanding of the ethical, environmental, legal and societal context of what the organization is doing. It is an awareness that focuses on the idea that the organization is a part of society and therefore, responsible for its actions. (Kotler, P. & Keller, K. 2006, 12).

Relationship marketing is most commonly believed to have become a dominant marketing philosophy in today's holistic marketing ideology. It aims at building long term

relationships with all stakeholders (suppliers, distributors, employees, customers, and others). With long term relationship strategies, organizations are able to build ties and create repeat purchases with their valuable customers. (Peck, H. et al. 1999, 44). Building strong relationships entails the ability to understand the different stakeholders and their needs and objectives (Kotler, P. & Keller, K. 2006, 9).

Marketing, as all other aspects of business, has always been strongly connected to technology. As technological advancements are introduced and become the norm, companies find new ways of doing business. In the following chapter, the Internet is introduced as a technological advancement that has affected the business world greatly. Marketing is no longer purely about production, selling and delivering but more concerned with creating long term relationships and partnerships (Buttle, F. 1996). The Internet can and has been used as a relationship building marketing medium for companies to use within the company itself as well as externally.

2.2 The effect of the Internet on business

Over the past few years, with the technological advancements and free market opportunities, businesses have begun reaching consumers all over the world directly. The Internet has reduced the distance between buyers and sellers. This has led to the elimination of the expensive distributors and middle men.

Internet technology allows the economies of scale and capacity of mass production to be retained (Chaffey, D. et al, 2000). The Internet has brought forth a new modern concept of mass customization. Mass customization has allowed customers to become more involved in the production of their custom product. The terminology given to the consumers today is phrased as “prosumers”, as consumers have become part of the production. Mass customization is a result of relationship marketing, where allowing interactivity is based on the ideas of relationship building with clients. (Bardakci, A. & Whitelock , J. 2003). Online communities have been built and peer to peer networks have been set up to encourage customers to help one another with issues, such as different purchasing options and technical problems. This has led to a sort of “self-inflating balloon of knowledge” which can be easily maintained by the company without large costs (Bardakci, A. & Whitelock, J. 2003). This cost effective solution has become very popular amongst IT developers and students.

The need for physical store locations and the importance of establishing brand value cannot be derided, even with the Internet becoming a large marketing medium. At the turn of the millennium, even Internet eBusiness giant Amazon began alliances with Walmart. The alliance was established to increase visibility and brand value, by having in-store promotions in exchange for assisting Walmart to set up and run their e-tailer store online. The core purpose of this alliance was to build relationships with clients by giving them exceptional choices of how to purchase, receive, and return products. (Business Week 2001).

The development of the Internet has also reduced costs in many areas of business by shifting the processing responsibility, from the company to the customer. One example of this shift is Internet banking, where customers access their accounts online, rather than going into their local branch. Another industry which has felt this shift is the travel industry with their online booking possibilities. Travel agencies have moved almost entirely to web based ticket selling (Cohen, G. & Harris, L., 2003). These examples illustrate how the Internet has cut costs and simplified procedures for both the company and their customers.

The Internet has been noted as the new marketing messenger for diverse geographical demands. Rayport and Sviokla (1996) call this the “electronic marketplace”. Unlike the traditional marketing mix where the place has always meant a physical presence, the Internet has become a place with virtually no real contact between the buyer and seller. Hagel and Armstrong (1997) demonstrate that the Internet has surfaced new (virtual) communities and commercial arrangements that disregard traditional boundaries between companies. Due to the scalability and virtual geographical nature of the Internet, competition between physical locations has shifted towards trying to gain top positions for popular keywords on search engines such as Google.

Peppers and Rogers (1997) are renowned for the concept of “one to one marketing communication” which has become a famous ideology in the relationship marketing concept. The Internet has brought this focus by allowing companies to send personalized messages at a very low cost, to all the prospects and visitors who contact them. Hoffman and Novak (1997) suggest that the Internet and website of a company, can allow consumers to merge away from playing an inactive role as receivers of market-

ing communications, as exemplified by the conventional “4P” marketing mix. The interactivity on company websites allow consumers to play a more active role in decision making processes and to become active members of the innovation of the company. Furthermore, this helps the company to form stronger and longer bonds with their clients.

The early notion of websites being mainly used to see how many visitors (hits) it gets, has been called the “one to many advertising” which is equivalent to mass production and distribution in the manufacturing industry. This notion has been replaced by relationship building and personalized service provided to each client individually. Parker (2000) reasons the end of this old traditional method. He believes the development of “permission marketing” is the method more suitable to attract today’s consumers. This method allows consumers and visitors who have expressed interest to be active on a voluntary basis. Parallel to relationship marketing, the idea behind this new method is to build trust for long term relationships as well as brand awareness. Godin supports this reasoning in similar fashion:

“As new forms of media develop and clutter becomes ever more intense, it’s the asset of permission that will generate profits for marketers” (Godin 1999, 52)

Relationship marketing is not a new concept, as it has been used and practiced by lawyers and other servicemen before; yet, it has only lately been a new addition to the main stream business industries and has been developed and brought forth through recent technological advances.

With the development of inter-organizational networks on the Internet, customers have gone from communicating with one company to communicating with the many various partners of the company that all share information across a wide network (Kalakota, R. & Robinson, M. 1999). Terms such as data warehousing and data mining are used to understand that information is being shared and can be located by all parties using the network. This method of providing information through a large shared information data warehouse is called the “all to one marketing” (Luengo-Jones, S. 2001). This has become the new reality for business partners. Many of the large businesses have already begun partnering with each other and started sharing information (i.e. Nokia teams up with Intel and Facebook, Yahoo and Microsoft team up

against Google). Each member of the network contributes to a particular area of know-how. All members are allowed to access key knowledge and skills from other partners through this central data warehousing base. Although this has had a positive affect for businesses and their partners, one of the major current issues with these ever increasing networks is the concern over who rightfully owns all this information, as trade secrets are being released and customer information is being spread around to third party members. (Kalakota, R. & Robinson, M. 1999, 18).

Sheth and Sisodia (1999) call the change from competition to strategic information sharing partnerships, the “co-petition”. This cooperation between competitors allows businesses to create synergies of pulling and putting resources together in order to serve different possible markets that were out of reach before. Fullerton (1988, 73 - 89) quotes:

“Today, the progressive man makes careful intensive studies not merely of the consumer's recognized wants, but of his tastes, his habits, his tendencies in all the common activities and relations to life. This he does in order to track down unconscious needs, to manufacture goods to satisfy them, to bring these products to the attention of the consumer in the most appealing ways and finally to complete the cycle by transporting the goods to him in response to an existing demand.”

On the other side, Sheth and Sisodia (1999) take a strong stance against the Internet and note that the Internet is actually threatening the separation of buyers and sellers by “disintermediation and re-intermediation”. Now more than ever, there is less face-to-face personal selling. Although it may seem as though the buyer and seller are closer, the use of the Internet does eliminate the human interaction when a customer purchases the product/service online. Hence, the Internet does not provide all the answers to the relationship marketing era.

Sheth and Sisodia (1999) also go on to criticize co-petition, stating that competitive advantages are threatened by co-petition as large market share holders are joining forces and developing oligopolies. They also mention how market segmentation is threatened by mass customization. With the ability to reach consumers all over the world, large corporations are using mass customization to appeal to a larger than ever before market segment. This reach and mass customization has broken down barriers that were once known to be difference between certain market segments.

Hoffman and Novak (1997, 45-59) focus on how consumers have begun to amass more power during the relationship marketing era. With the Internet, consumers are the ones who are required to be active and therefore, the luring of consumers to the website comes down to how well the consumers can find the website. This is where online marketing begins to play a large role in how companies can direct consumers to their websites. This is one of the primary factors in today's world of information. As the Internet gains its foothold on the ever growing market share of providing and selling products/service, search engines power of ranking becomes even more essential. Companies now need to make sure that they are appropriately represented online and that they can be visible to these active consumers through the search engines.

The impact of the Internet is great but it must not be thought of as the new revolutionary marketing concept. It is a development of technology that has assisted marketing to shift its focus more on relationship marketing concepts such as interactivity, connectivity, providing better service, and building relationships (Vargo and Lusch 2004). It can be argued that the Internet offers a capable means for carrying out today's relationship-orientated marketing ideology. New marketing terms have been coined (mass customization, emarketing, emarketplaces and personalized communications) and new methods have been developed. The Internet has essentially become an efficient marketing medium through which even traditional communication and exchanges can occur between the company and their stakeholders.

2.3 The Internet as a marketing medium

The Internet has become a marketing field through which new and old clients can be reached. Strategically, marketing has shifted its focus in a new direction from trying to lure people into sitting in front of their televisions or reading daily newspapers, towards providing a channel with informative messages, which are conveniently available and patiently await interaction from the user. On the Internet prospects can visit the information provided at any time they please, whilst having the ability to stay there as long or as little as they desire. In this marketing medium, the extent to which the users stay and immerse themselves in the information provided is completely at their own discretion and up to their own personal interest. The Internet is a dynamic marketing medium, it does not restrict targeting the intended audience at a certain time

of the season; moreover, it allows companies to target the market all year round. (Sterne, J. 1998, 1). The Internet has opened up a new market where the whole world is the stage. This means it has allowed one to create a collection of information which will be available to all who use the Internet. The possibilities of this new marketing medium are said to be more limited by the confinement of imagination and the available resources than by the technology of the marketing medium itself. (Sterne, J. 1998, 2).

Companies can collect information about the wants and needs of their customers by using the Internet. The Internet has been used to add value to business in many ways, for instance full time customer service and quicker response times. It is also being used as a direct sales channel, through which products and services can be informatively displayed to the public. The possibility to sell online exists; the Internet has become a direct sales channel through which consumers can buy products by clicking their way through the checkout of an ecommerce website. The true value of the Internet lies in its role in today's ever globalizing one market concept.

Marketing has been affected by the Internet due to the increasing price transparency online, its instant speed, its global reach and its cost efficiency. The Internet allows information to be collected easier than any other method ever used before and it fosters interactivity between the company and their customers. The ability to communicate in all directions by all parties has magnified the power and the role of the Internet in today's Holistic Marketing concept. The collection and interpretation of information is no longer a complex phenomenon as the Internet provides improved interactivity and multiple communication methods between its users. It has extended itself into a large service channel for companies to use for their customers. Companies can compose diverse methods to communicate their marketing messages to different client groups at all times.

All of these marketing methods exhibit the strong development in the world of information technology and the Internet. The Internet is essentially a large arena with millions upon millions of websites. These websites are created and owned by individuals and companies. The following chapter provides an understanding of how websites are important to today's mounting Internet use.

2.4 Business websites

Businesses use different marketing mediums to communicate to their target audiences. As discussed in the earlier chapter, the Internet has become a dynamic communication channel for information. Information and messages of individuals or businesses are placed into unique pages on the Internet. A page on the Internet is called a web page. A web page can contain text, images, videos and other digital scripts. A collection of web pages belonging to the same domain name is called a website. In order for the website to be displayed on the Internet it needs to be hosted by at least one server that can access the Internet. The web pages of the website can be viewed by typing in the Uniform Resource Locator (URL), also known as the homepage, into an Internet browser. (Wikipedia. Website 2009).

A website is a cost effective and versatile communication channel through which information is communicated through to others. Businesses can benefit from their website in many various ways and utilize it to serve different purposes. The use of the website depends greatly on the nature of the business, its products, services and most importantly the behaviour of its target audience. For many businesses, the Internet has become a major part of the customer's journey and search for products to consume. (Internet Advertising Bureau 2009).

Businesses use their website to present information about the business, and usually include information such as what the business is about and how business is done. Websites can be easily accessible by all the business's stakeholders. A website offers all businesses the opportunity to paint a picture of the business to its targeted audience. In order for the website to have a positive influence on the business' bottom line, it must be planned well, designed and configured strategically to produce measurable results. A business has goals and the website must be formed in a way to help the business achieve its goals.

Constructing a good website requires time and commitment. One of the greatest misconceptions of a website is that while a business may think they need a website right away, there is not much thought put into the creation process. A website should not just be ticked off the "to do list". The website should be a part of the company's strategy and should be properly developed before beginning the website project. There is a

frequent misunderstanding of what a website's role is in terms of marketing. (Pakroo, P. & Caputo C. 2008, 222 – 223).

Every business can have a website. Some businesses may just need a simple web page with an introduction of the company and its contact information, whilst other businesses may depend heavily on their website and require something more extensive. A website can be a valuable marketing tool for any company, in particular, for companies that are primarily based on the Internet, such as Funnelwebs.

The aim of a company website is to create an informative, interactive and entertaining experience for the website visitor, thus creating value for the visitor's journey through the website. A company website should be a value adding feature not only to new visitors but also to the existing clients of the company. A website can be used to obtain statistical information on the visitors of the site and allow the company to track and segment their customers as well as follow their purchasing behaviours (Google Analytics 2009). This information can then be used to find better ways to customize and personalize the marketing communication between the company and the customers.

Berthon, Pitt and Watson (1996, 44-47) believe that a website is a great marketing tool because of factors such as the ability to reach a large volume of audience, to personalize messages, to provide all the necessary information to the customer as well as due to the continuous immense growth of Internet users. A website is used by marketers to create relationships with the customers via interactivity on the website (i.e. feedback, trial versions, prizes, peer to peer production). The website can also provide customers with real time support and news. Customers can acquire the latest reports conveniently during their own time (Breitenbach, C. & Van Doren, D. 1998, 561). A company website can also be a cost efficient solution for services such as customer support and sales.

Harris and Cohen (2003, 948-952) discuss about some of the issues that are shifting marketing during the Internet age. The first discussion involved the distance phenomenon, which according to Harris and Cohen, the Internet is eliminating the distance connecting customers and companies. Websites also has pushed companies to be more transparent; however, it has also negatively affected new innovations. This can

be seen with the way product life cycles have been reduced and the way many products that are showcased on websites are being copied, shared or further developed by others.

The challenge for marketers is to get Internet users to visit the website. Websites that are poorly built and have unfriendly navigation often turn away potential clients. Breitenbach simply states:

“To lessen the barriers to visit a website it has to be easy for the customer to use and to contain valuable content.” (Breitenbach, C. & Van Doren, D. 1998, 562)

Geissler (2001, 488) investigated and interviewed 50 website designers in search of answers on website design and attractiveness, website buyer's objectives, communication effectiveness and the marketing aims for having a website. Throughout his research, there was one main recurring theme: business was and is the main reason for having a website. This gives an understanding of what websites are made for. The reasons listed for having a website according to Geissler (2001) were as follows: to establish a presence online, to expose and advertise the company to the users and clients, and to provide value to the clients.

Geissler's (2001) research signifies the main reasons for having a website and his conclusions were direct. Companies are looking to do more business. Whether it is to add value, to get more exposure or to advertise, each company looks to expand its business by having a website. In today's world, where the Internet has increasingly become more depended on at many levels of society, the idea of not having a company website is quickly becoming a past era.

There were three factors taken into consideration by the respondents when answering Geissler's questionnaire of what the proposed model for designing and maintaining an effective website to facilitate online customer relationships entailed. The factors were key marketing approaches (segmenting the customers), website design (characteristics of the visitors) and online customer conversion process (creating awareness).

Palmer (2002, 151-167) and Nielsen (2000) claim that a successful website has five characteristics: easy to navigate, interactivity, short loading time, high quality and high receptiveness. All of these attributes are important, since they help the user inter-

act with the website. Business should aim to provide a user-friendly experience to their customers. Once a business has created a website that has the characteristics of a successful website, the attention should be placed on marketing the website.

The main purpose of having a website is to attract visitors and the lure is information. (Bidgoli, H. 2004, 733) Visitors find new websites by searching for keywords by the use of search engines. 84% of Internet users have used search engines at least once and 56% of Internet users use search engines on a daily basis. The use of search engines is closing in on the 60% mark of Internet users which has only been attained by the email phenomenon. (Reed Business Information 2008). As a result, a website that does not come up on a search engine is very unlikely to be found by anyone not familiar to the website. It is similar to a shop that cannot be located because it has no signs on the main street directing people towards the shop. A website's main streets are the search engines. They are the streets through which traffic is directed to the website. Once visitors arrive at the website, a website becomes a strong contact point. Now, companies can make themselves available to their clients 24 hours a day offering information, services, products, promotions and a much more.

As the Internet has become a marketing medium, the website has begun to play the role of the communication channel. Taking into consideration that the Internet and the website have a relevant role in the world of marketing, it is important to understand that websites are not found on the Internet without coming up on search engine results. The following chapters will focus on Internet user search as well as on developing an appreciation for how search engines play a vital role in a website's success.

3 SEARCH ENGINE MARKETING

During the dot-com era of the mid 90s, as online marketing began, the marketing was often carried out by computer engineers who lacked experience in traditional marketing. They tried reaching their audience using methods such as banner ads, bulk emails and portals. Often these trends were not measured for long term success. (Ramos, A & Cota, S. 2008, 3).

Businesses can get traffic to their website by advertising through media outlets such as print media, television and word of mouth. However, this study focuses on search en-

gines as a marketing solution. Marketing on search engines is known as search engine marketing (SEM). SEM aims to increase the visibility of a website; the website is the tool which can connect the user with the company. This study does not focus on the design of business websites; the focus is on the marketing of the website to attract more people. Unlike most of the major advertising methods, SEM allows even small companies with limited capital to compete for a strong position in the online marketplace. (Garner, R. 2008). The main forms of SEM include:

Pay-per-click (PPC) advertising: Text ads targeted to keyword search results on search engines through Google Adwords. These advertisements are usually displayed as Sponsored Results.

Contextually targeted text ads: Targeted text ads selected to appear on web pages which are of the same subject as the advertisement itself. For example, news articles and blogs using Google Adsense, the advertisements will be relevant to the topic the user is viewing.

Organic SEO: The practice of using a range of techniques in order to improve how highly a website or page is listed in search engines for particular keywords. Organic results are the standard search engine results. The organic search results are not the sponsored links.

In recent times a new sector of business has emerged, offering SEM services which promise to push their client's websites to the top of Google (and other search engines) to specific keywords.

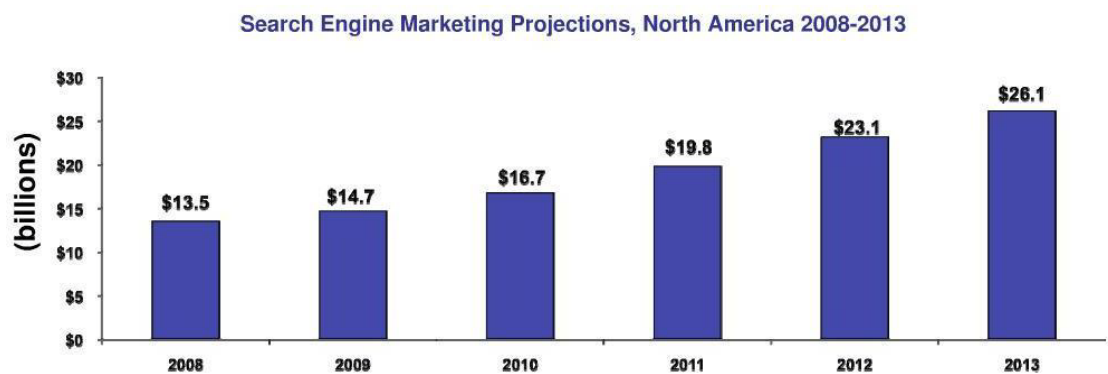


Figure 1. North American Business SEM Expenditures to Reach \$26B in 2013
(Sempo 2009)

Figure 1 is a survey that was conducted by Sempo (Sempo is a global non-profit organization that promotes search engine marketing and provides educational resources to members and consumers) in 2009. According to the predictions made in Figure 1, business in North American will almost double their expenditure on SEM in the next five years. SEM has become useful to many companies and its value continues to increase due to new tools such as analytics. Now Google is offering reporting tools that provide in depth analysis and study of the advertising that is carried out on search engines. Since this study is dealing with Google, the focus is on Google's reporting tool called Google Analytics. Analytics enables businesses to easily monitor, measure and analyze their online marketing efforts. Google Analytics allows a business to compare and contrast between PPC and SEO campaigns as well as provides in depth information on where the website traffic has come from, how long users spend time on the website, how much it costs the business to get these high quality leads. Analytics is a great tool which can help businesses understand and anticipate customer behaviour. This information gives the ability for a company to calculate a quite accurate value for each individual visitor. (Ramos, A & Cota, S. 2008, 4).



Figure 2. Marketing vehicles respondents cited as among their top three by return on investment for advertising agencies in North America (Sempo 2009)

In Figure 2, the chart indicates that Search Engine Marketing was the most efficient form of advertising with PPC (also known as Paid Placement) and organic SEO being the top two marketing vehicles in terms of the return on investment. This shows that marketing online can in some industries and areas of business (such as advertising agencies) be seen as a more efficient way to market than that of marketing on television and print media. This is because it is much more difficult to calculate and analyze the impact of a television commercial and that of an advertisement in a newspaper. With detailed statistical analytics on visitors of the website, PPC advertisers and search engine optimizers can easily make reviews and reports as well as calculate the value of each visitor. (Ramos, A & Cota, S. 2008, 4).

The Internet has become filled with spam and marketing pages which have made users very sceptical about whether they are receiving paid results pushing to get them to purchase items. This is why users prefer organic search results over sponsored links. Research has proved that sponsored links do not get as many clicks as do the organic search results, but sponsored links are a quick and easy advertising solution.

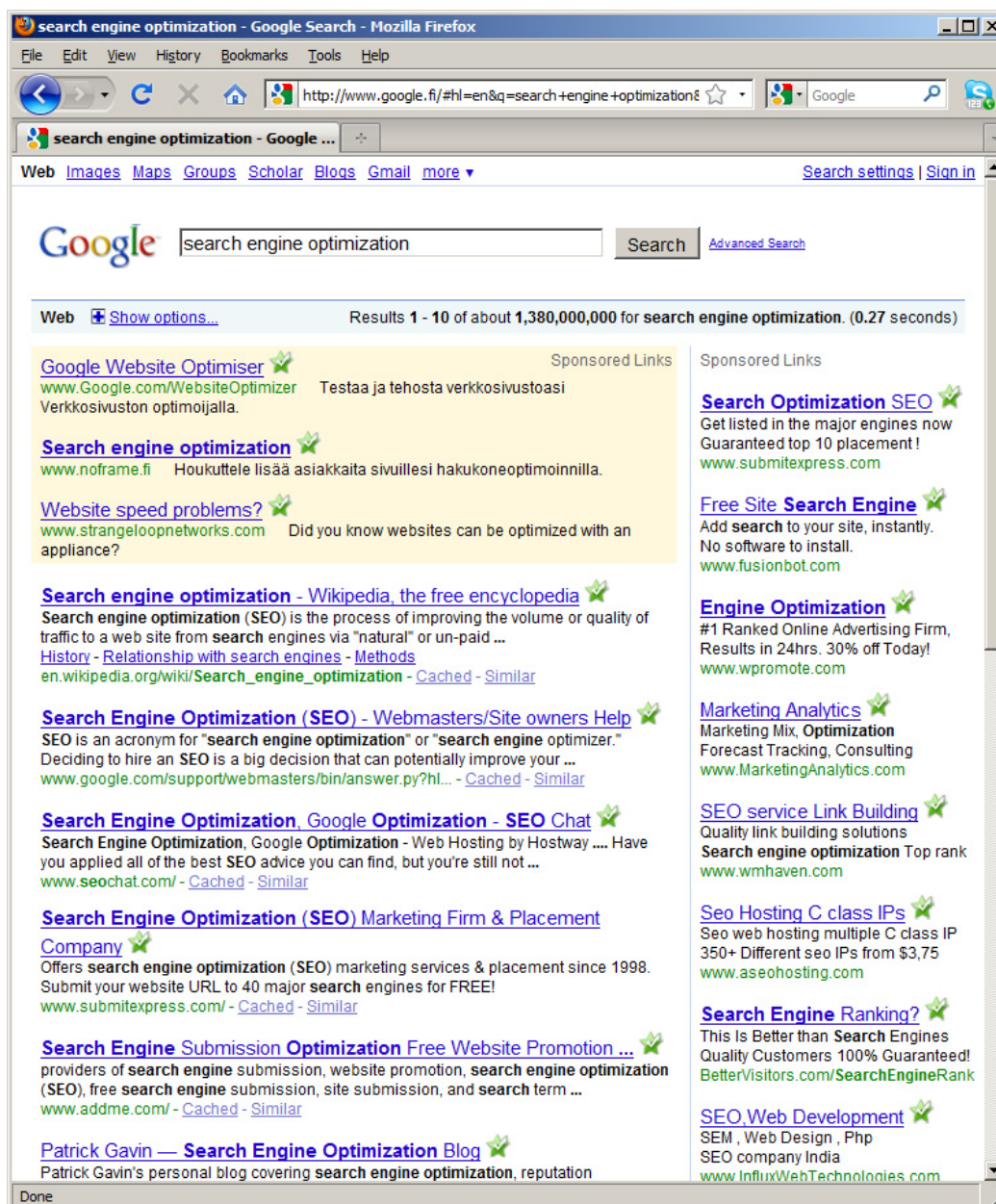


Figure 3. Screenshot of Google.fi for the keyword 'search engine optimization' [referred on 8.11.2009]

In Figure 3, the sponsored links are displayed at the top of the search and the right side of the search engine results. Google displays ten organic search results on the first page of the search. The keyword used for this search was search engine optimization. This keyword is placed in the search field on top the page. To search for results for this keyword, it is necessary to press the search button. Doing the following procedures, the user will arrive to a page such as Figure 3, with the first results listed on one page for the keyword search engine optimization. The majority of users will click on one of the first few listings, very few users continue to browse the second, third or

fourth page results; therefore, in order to be found and attract visitors it is vital to be listed on the first page of Google. SEO is only involved with the organic search. Organic results, in the first page of results, only include the ten results that come below the sponsored links and are placed on the left hand side of the results. In Figure 3, the first organic search result is Wikipedia's web page for search engine optimization.

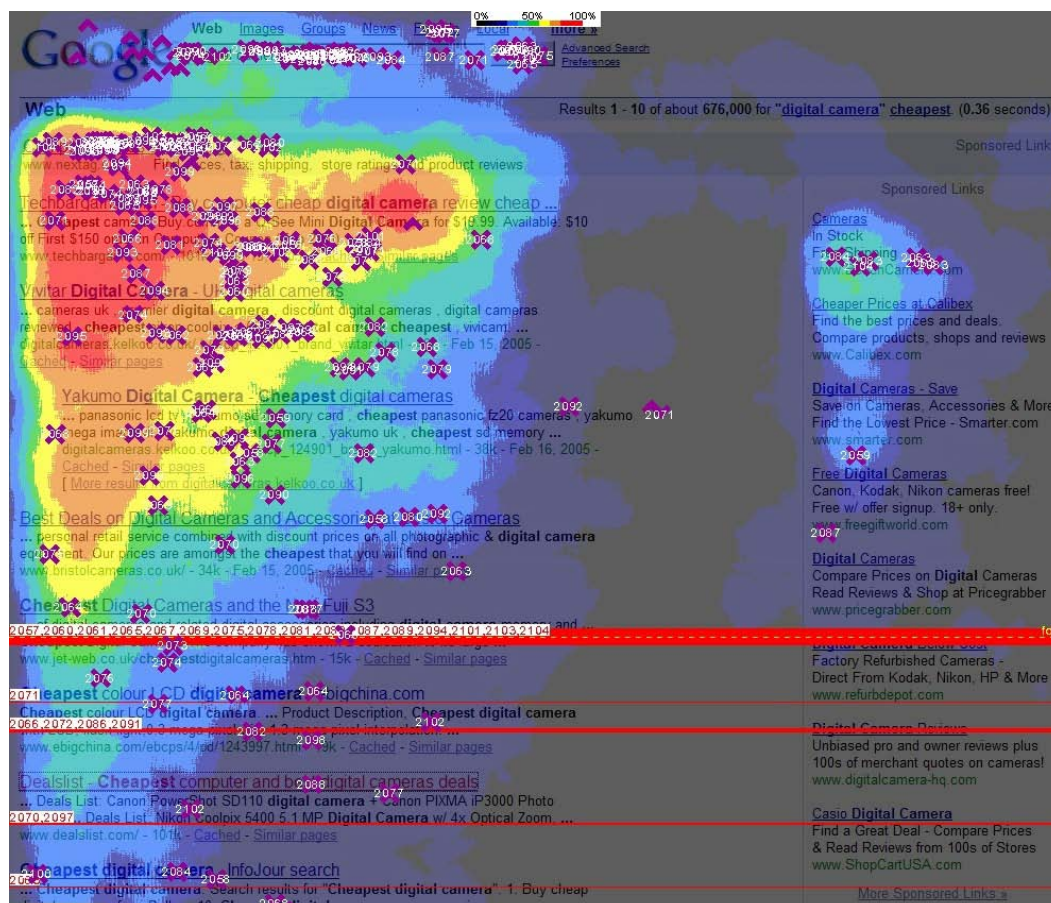


Figure 4. Click heat map, user behaviour showing where most users click on the search results page (EyeTracking Study 2005)

Figure 4 shows a heat map study by Eyetracking Study. Eyetracking use techniques to provide information on how users search for information. In Figure 4, it is evident that the majority of the clicks by users received go to the first two results, which receive close to 100% of user clicks. From Figure 4, it is clear that the organic results on Google receive more clicks than the sponsored links on the right hand side.

Businesses want to be found and they want to be on the first page on Google for relevant keywords. Therefore the question remains, on what basis does Google decide

which web pages come up first? The answer to this question could be used as the tool to build a top position on Google; this study aims to answer that question.

3.1 Internet usage statistics

The size of the Internet is difficult to measure. It is a near endless source of information which is constantly growing at an exponential rate. Recent estimations suggest that approximately 25% of the world's population use the Internet (Miniwatts Marketing Group 2009).

Due to the immense enormity of the Internet, Internet users are driven to use search engines to find what they are looking for online. If search engines did not exist, navigating the Internet would be very difficult for the user. The Internet in terms of an organized structure fails to abide by any sort of hierarchy. It seems to be an ever growing pile of information without any semblance of order; therefore, search is the one feasible solution to information organization on the Internet. (Potts, K. 2007, p. 286). A search engine enables the Internet user to simply type in a keyword or phrase, and be flooded with thousands of pages of related content. Search, in the context of this study, is a search for information on the Internet, carried out by using a search engine. A search engine is a software program that searches for web pages based on the words that one enters in the search engine as search terms. (Boswell, W. 2009).

According to research undertaken by Statistics Finland in 2006, approximately three out of four Finns from the age of 15 to 74, used the Internet in the spring of 2006. The percentage of Internet users under the age of 40 was nearly 100 %. (Statistics Finland 2006).

The research also questioned the reason or purpose of using the Internet. The two greatest purposes, both standing at a strong 87 % were "Sending and receiving emails" and "Finding information about goods or services". "Browsing travel and accommodations websites" was at 68 %, "Seeking health-related information" was at 56 %, "Looking for job or sending job application" stood at about 34 %. The research did not include a category specifically labelled "Search"; however, considering the nature of this Internet usage, the above purposes (Finding, Browsing, Seeking and Looking for) involve search or are in fact Internet search in action; therefore, search is a major

Internet activity. The way to search and find information online is by the use of a search engine. Searching on the Internet has recently become a part of everyday modern life. The usage of Internet users has increased further since 2006. Furthermore, in 2006, 29 % of users stated that they were “Ordering or purchasing online” which increased to 33% in 2008. (Statistics Finland 2008).

The November Annual Electronics Issue of Consumer Report (2007) concluded a study where they claimed that in most cases, consumers shopping online for televisions, digital cameras, laptops, or air tickets were likely to get better prices and selection than if they were to purchase these goods from retailer shops. Internet usage and online shopping are both steadily increasing year by year.

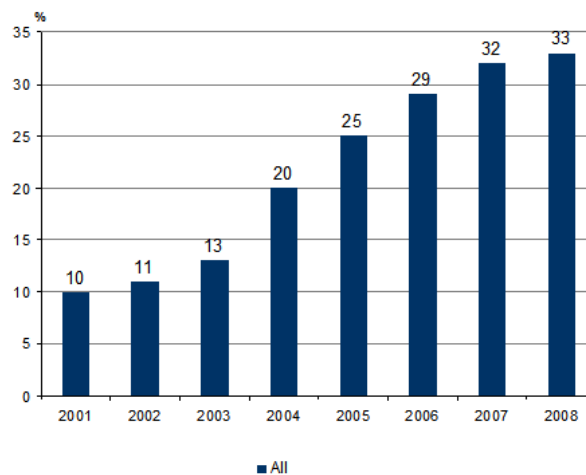


Figure 5. Online shoppers during the past three months in 2001 - 2008, per cent of population aged 16-74 years (Statistics Finland 2008)

Figure 5 demonstrates how online shopping has increased dramatically from 2001 to 2008 in Finland. As the skills of using a computer and the Internet have become customary to most Finns, it is more likely that online shopping will continue to increase. The increased security for purchasing online and education provided on shopping safely online will continue to lead more consumers to cutting their costs and making online purchases.

3.2 Significance of search

Search has opened doors of opportunity and provided the business world with new insight of exactly what people are looking for. While traditional marketing was based on the concept of first make and then sell, today it is all about finding what the consumer is looking for first, and then producing a product to fit their specific needs and wants. Since the beginning of this search era, users have begun to submit exact keywords and phrases, which express what they are looking for into the search engines in hope of finding what they are looking for. These search queries which users are submitting can be perceived as confessions of what people are looking for. All of this information is recorded and made available to the public. This search information is of great value to businesses. Never before has it been easier to discover what consumers are actually looking for. With advanced technology, which has been further developed by Google, anyone can access and sort through detailed data of what is being searched for, not only on a global scale, but search data can also be filtered by geographic location and language. (Google Keyword Tool 2009). Popular keywords can be researched and studied by using Google's Search-based Keyword Tool. The tool can deliver comprehensive information on any search phrase with monthly figures on the number of searches made as well as the keywords level of advertising competition. The data is derived from anonymous Google search data, which is automatically collected from users all over the world who use Google. Google claims that it does not contain any personally identifiable information. This may be why Google has made it available to the public. (Google Keyword Tool 2009).

Companies that have been around longer than the Internet are now working on new ebusiness models. Other new businesses are starting up with the sole purpose of operating only in the electronic market space; these companies have their entire business plan focused and based on the Internet. Some older businesses, ones that in the past were not interested in being a part of the Internet phenomenon, have now moved into ebusiness. Many small companies are being left behind, as they are still struggling to take the plunge into the world of ebusiness. Resistance from management or procrastination towards ebusiness has been proven to be one major cause of several companies being left behind. It is often due to conservative management resisting change as well as the lack of an online vision. (Weill, P. & Vitale, M. 2001, 1).

Businesses that spend a great deal of time and money planning their website, may fail to consider how they expect the people (target group) to find it. It is a common mis-

conception that a business presumes their website will automatically be listed highly in Google and get flooded with hundreds or thousands of potential buyers. An example of this misconception comes from Linda Pinson, author of *Anatomy of a business plan*, as she writes:

“Remember to register with the search engines! They direct traffic to your website, and you are unlikely to be discovered by your target market without their help, unless you are already a major brand name... once registered [with the search engines] your website keeps working for you 24/365!” (Pinson, L. 2001, 53)

On the contrary, Peter Kent (2008, 148) states that submitting a website to the search engines is not enough. It does not guarantee that the website will rank well or that it will even be included at all. There are many more factors involved in getting a website into a visible position in a search engine.

This chapter has introduced search as one main purpose of using the Internet. Search reveals what people are looking for, this information is available to the public and business can use this data for market research. Business websites, in most cases, will not automatically appear in the top of the results for relevant and popular keywords search engines.

3.3 Search Engines

The first Internet search engine was a web crawler which was launched in April 1994 (Pinkerton, B. 1994). Alan Perkins defines a search engine as:

“A system that uses automated techniques, such as robots (spiders) and indexers, to create indexes of the Web, allows those indexes to be searched according to certain search criteria, and delivers a set of results ordered by relevancy to those search criteria.” (Perkins, A. 2001)

Currently, the most popular search engine is Google. In the U.S., nearly half of the searches are done with Google, followed by Yahoo with a 28% market share (Sullivan, D. 2006) Although there are many people who use Yahoo and other search engines other than Google, the focus of this study will be SEO based on Google. The reason why the study does not focus on all search engines is because, although the large search engines are similar in many ways, they do not operate the same. Also, this

focus is done in order to draw borders around the study, which in turn make the research more focused on the results rather than the unknown differences of search engines and their behaviours. These differences in operation, algorithms and methods used are all trade secrets which one can only speculate about. (Page, L. & Brin, S. 1998)

3.3.1 Google architecture

The architecture of the Google search engine contains four major parts: a crawler module, page repository, indexer, and a ranking system. According to Larry Page and Sergey Brin (1998), due to the growth of the Internet, scalability has been taken into account at every stage of the construction of the Google Search Engine. The architecture of the search engine was built so that it could eventually support research activities on large-scale web data. The system features were created with the intention of creating a search engine that could bring forth results in split seconds and precision results to match the keyword used to search with.

3.3.2 Google web crawler

Google sees a website very differently than a person does. The Internet is a global network and the data is retrieved by web crawlers. Web crawlers of Google are used to generate a copy of all visited web pages in order to index the web pages to provide faster searches. This web crawler visits all the web pages on the Internet which it scans from time to time and indexes the updated information of the web pages. Each web page, the web crawler finds, is then ranked based on the Google search ranking system. The web crawler is a computer program that is automated to do these processes systematically. For Google's search engine that can be used worldwide, there have been highly efficient storage systems set up and acres of servers. (Wikipedia. Web Crawler 2009).

3.3.3 Google search ranking system

The focus of search engine rankings is to produce accurate results. The search engines have been separated into three generations in terms of the type of ranking system used. The first generation search engines categorized web pages according to the data

that was presented on that current page in terms of text and format. The second generation search engines began to categorize off-page data in addition to the data presented on the current page. Google was the first search engine to introduce this new type of ranking system which was later developed to the third and latest generation search engines. These third generation search engines use hundreds of algorithms to produce the results and the ranking system. (Broder A. 2002, 3-10). In order to keep their trade secrets hidden, Google adjusts their algorithms as these ranking algorithms are significant to the success of any search engine (Ridings, C. & Shishigin M. 2002).

3.3.4 Google PageRank

PageRank (PR) was created by Google's Brin, Motwani, Page and Winograd (Page, L. & Brin, S. 1998). The PR algorithm is the measuring of global and geographically targeted importance of a web page. It is said to calculate a global value score for each page. The importance in a web page's PR is said to be realized mainly by the number and quality of back links; however, only the engineers at Google know what the current PR algorithm is (Gyöngyi Z. et al. 2006, 439-450). PR has been seen as the major factor that has made Google the number one in the web search industry in both numbers and popularity (Sullivan D. 2006).

Google recalculates PR scores each time the Google web crawlers crawl the Internet and rebuild its listing (Ledford, J. 2007). It contains numerical weighting that is placed to each element of a hyperlinked set of documents, with the purpose of measuring the relative importance within the set (Wikipedia. Page Rank 2009).

PR is no longer the only main important factor in SEO due to the amount of spam and link farms that have been built (Langville A. & Meyer D. 2006). The algorithms are now more complex and many different factors carry weight in ranking high in Google. Google is intent to continue improving their algorithms in order to give less biased and more relevant results.

3.4 Search engine optimization as a marketing tool

Search has become a part of everyday life for people all over the world. Similar to other forms of advertising, such as print and television, Search engines can be used as

a marketing tool to draw in more new customers. SEM aims to promote a website by increasing its visibility on search engine result pages (SERPS), both by PPC and SEO; however this study focuses only on SEO.

SEO involves researching what people are searching for online. The key is to find popular keywords which have a substantial amount of regular search volume, and are relevant to the product or service which is to be marketed. To find keywords which are not overly competitive can be challenging for any industry. Once the keywords have been sought, content for the website must include the keywords, aiming to make the search engine regard the content as relevant to the targeted keywords. Many more factors are involved in causing a website to rank well in search engines.

The research of this study will aim to discover the most influential factors, apart from website content, which push business websites to the top of Google, without paying Google for advertising. With SEO, companies can target keywords that will help their company increase the number of potential prospects to visit their website and ultimately to increase their revenue.

3.5 Advantages of search engine optimization

SEO has many unique advantages. One example is its ubiquity. Anyone can search at anytime from anywhere, provided that they are on the Internet. Furthermore it does not cost the user anything to search. The search technology works interactively with the user. Action from the user is required as searching on the Internet is a voluntary act. The user initiates the search in a search engine and chooses which results to click. When a user clicks a listing from Google, (s)he has done this act voluntarily; therefore, because it is the user's own action, (s)he is more motivated to explore the website which they have opened. (Allainet, Inc 2008).

Most forms of advertising, both online and offline, in some way interrupt consumer behaviour. SEO is a non-intrusive form of advertising. With SEO, the user is actively seeking information; therefore, if the businesses website is relevant to the user's search; ideally it will be of interest to the user, than for example a random banner or an abrupt pop-up advertisement. This also means that prospects arriving on a company

website from a search engine results page (SERP) are highly targeted prospects.
(Ramos, A & Cota, S. 2008, 12).

3.6 Search engine optimization ethics

The methods used in SEO are referred to as white hat techniques, SEO techniques, and ethical techniques. Spam techniques are referred to as black hat techniques and unethical and unfair techniques (Langville A. & Meyer D. 2006). A discussion of SEO would be incomplete without taking into consideration what occurs when ethical SEO techniques are abused. As more SEO techniques become abused, these once known to be great techniques are spoiled by a few bad examples and quickly become frowned upon (Rognerud, J. 2008, 112).

While a general opinion to black hat techniques are referred to as unfair manipulation, it could be argued that SEO in itself is manipulative tactic, which in its primitive form is manipulation of the search engines. The main objective of SEO is to manipulate the search engines into positioning the site higher in their ranking system which is based on mathematical algorithms (Rognerud, J. 2008, 112).

Google has placed a clear set of search engine guidelines for SEO practices in order to reduce black hat techniques. Clear black hat tactics include intentionally harming competition and involves property rights violations such as duplicating the content of other websites. Jon Rognerud (2008, 113), author of the Ultimate Guide to Search Engine Optimization, composed a list of the main black hat practices:

1. Duplicate content
2. Content Spamming
 - a. Keyword Stuffing
 - b. Content Keyword Stuffing
 - c. Image Keyword Stuffing
 - d. Meta Tag Keyword Stuffing
3. Invisible Text Keyword Stuffing
4. Hidden Links
5. Wiki and Article spam

The main black hat techniques are placing (stuffing) the keyword all over the website by creating invisible text, hidden links and spamming other sites. Each search engine has guidelines for its users. Google has a whole webmaster support section in their website which helps users avoid breaking the guidelines unintentionally (Google Webmasters 2009).

Gori and Witten (2005) state that it would be optimal if the industry had common rules, so that there would be an unambiguous set of guidelines of what is allowed and what is against the rules. As in all business areas, ethics is defined differently by the creators, users and the consumers. Google's current guidelines leave much room for interpretation and therefore it has produced a grey area. Although Google has the right to change their search engine algorithms as they please, there are currently a growing number of businesses that depend on their ranking to get clients. The changing of algorithms leaves SEO companies in difficult positions. SEO companies are left to promise their clients the positions in Google that might not last very long. This is a large unknown for SEO companies as they cannot guarantee a 100% that the rankings will stay the same throughout the course of the project. This is also why SEO is an expensive service and is no longer considered a once off cost but an ongoing expense. SEO companies must keep optimizing the pages and making sure that the competitor pages are not optimized more efficiently.

The abuse of SEO techniques has pushed the development of the search engine algorithms further and in turn has brought more financial costs to everyone involved. Even though the developments have been good, it is the spammers who have figured a way to fill the top rankings in Google with spam web pages. Web spam is a negative result of SEO, but it will always be a part of the industry. (SEOMoz SEO Debate 2006).

Another ethical question is whether allowing a search engine company like Google to have the ability to affect the positioning of web pages is fair. Google and the other major search engines have an enormous impact on the Internet's traffic flow. Although search engine Google has a great reputation, is it right that they hold the keys to be able to direct traffic on the Internet to the pages that they deem to be relevant? In order to increase transparency, Google has publicly published much of the information it has researched. This information is for public use; however, all the empowering information is still being concealed. On a global scale, Google has a colossal amount

of detailed information, such as precise demographic and geographical data on consumer's behaviours - what and when products and services are being searched for. With all the information Google is gathering, it is apparent how powerful Google has become. (Privacy International 2007).

4 THE RESEARCH

Funnelwebs is a web design business located in Helsinki, Finland. This research aims to deliver valuable results for Funnelwebs to utilize and benefit from in their SEM efforts. Their marketing strategy is focused on reaching more customers via Google. Apart from word of mouth and back links on other websites, Google is the major source of new enquiries for the business. Currently, Funnelwebs pays monthly for PPC on Google Adwords in order to be listed among the sponsored links for popular keywords related to web design. The business wants to increase sales as well as reduce PPC advertising costs. The click heat map (shown in figure 4) demonstrates how more users click organic results than sponsored links. In order to cut PPC costs, whilst increasing traffic to the website, Funnelwebs must increase its visibility in the organic search results; this can only be achieved by SEO. This research is based on finding the best possible keywords for Funnelwebs to search engine optimize. The following research aims to provide Funnelwebs with guidance on which keywords would be best to optimize its website for.

The research involves the following five subsequent stages:

1. Identify and select potential keywords which are suitable for Funnelwebs
2. Analyze the competition (the websites which currently rank at the top of Google for the selected keywords)
3. Determine what is required to obtain a top position for each selected keyword
4. Compare the difference in competitiveness for keywords of different search volume
5. Conclude if a top position for each selected keyword is possible and worthwhile (based on the competition and popularity of each selected keyword)

These five stages were developed in order to give a coherent guideline which the researchers could carry out. The stages are explained in further detail in the following section.

4.1 Research methods and procedure of study

This chapter presents the methodology and the research procedures used in the study. The data collection and analysis methods are explained. All of the problems and issues that arose during the research are also critically discussed.

Quantitative research methods were used in this study as the primary method to find and evaluate the data collected. Quantitative methods can be used to create observable and measurable data. This was considered as the most convenient way to analyze the data of the keyword competition and SEO factors. Objectives of the research included constructing proven results through the use of careful sampling strategies (keyword research) and statistical analysis (SERP Matrices). (Glesne, C. & Peshkin A. 1992, 6 - 9). A hypothesis, of which keywords Funnelwebs could acquire top positions for, was used to develop statistical data. Funnelwebs plans to use the results found, from this hypothetical investigation, in their future SEO experimentations and SEM exertions.

Although the research results were evaluated objectively, the challenge of the research was to eliminate any contamination of data by the researchers. Researcher's objectivity has always been a concern in all researches carried out. (Glesne, C. & Peshkin A. 1992, 6). This research used multiple different sources and instruments to eliminate the subjectivity of using only one main source or instrument. The instruments used in this quantitative research to observe, measure and analyze the collected data are:

Google Keyword Tool – Used to find potential keywords.

Traffic Travis – Used to analyze keyword usage on web pages.

PR Checker – Used check the PageRank of a web page.

WHOIS records – Used to check domain age (the age of a website).

Yahoo Site Explorer – Used to calculate number of back links.

The above instruments will be explained in detail in the following section.

An optimal pedagogical study for SEO would have consisted of a longitudinal study done on the results of SEO (Muijs, D. 2004, 36). However, researching all of the variables and factors involved in SEO was not possible, due to the time and financial constraints. Therefore, this is a focused and concise study on SEO for Funnelwebs. The selection of keywords could have been deliberate in order to get the ideal results sought after; however, the aim of the selection was to find keywords that are of value to Funnelwebs. Decisions were based on the consideration that Funnelwebs is targeting businesses in need of web design services in Finland. This study will open the door for more research to be done on the subject of SEO and its practices.

The five phases of this research are of quantitative nature. The first stage of the study, to identify and select potential keywords, was completed by using the Google Keyword Tool to generate recommended keywords. The recommended keywords had a known search volume; meaning people have been searching with those exact keywords on a regular basis. The Google Keyword Tool allows the user to enter in a keyword; it finds similar and related keywords and provides detailed data on search volume. (Google Keyword Tool 2009). This enabled us to calculate the daily average number of searches for each keyword. The calculation was derived by taking the monthly average search volume of the keyword and dividing it by 30. The search volume was one underlying factor of determining whether or not the keyword would be worthwhile. The final part of the first stage of the research was to eliminate any keywords which did not appear to be relevant. The keywords which had sufficient search volume and were relevant qualified for the second stage of the research.

The second stage, to analyze the competition, required that the competition of each qualified keyword from stage one was thoroughly analyzed in stage two. Google is currently the world's leading search engine and it is the search engine which Funnelwebs is focusing its marketing efforts upon. Therefore, as mentioned earlier, this research is focused on Google as the search engine of choice. By searching for the actual keyword on Google, we identified which websites currently held the top positions for the qualified keywords. These competitors had to be scrutinized in order to understand why out of the millions of web pages, they came up first. In practice, the second stage analyzed both on page and off page factors. These factors are understood to determine the position of a web page in a search engine, and are explained in further

detail in the following chapter. Ideally, this aimed to reveal what is required to get listed on the first page and ultimately rise to the top of the results.

The third stage of the research was concerned with the changes to the website and SEO tactics which are required for Funnelwebs to implement, if they wish to aim for the first positions. Each keyword was analyzed separately and produced its own individual table, which enabled us to then analyze which keywords were of greater value.

In many cases we found it is not realistically feasible to achieve first position for some of the more popular keywords, because the competition is too high. The fifth stage of the research is concentrated on concluding whether or not it is possible and recommended for Funnelwebs to engage in SEO for the qualified keywords. These recommendations are individual to each keyword. The research comes to a close with the final comparisons and conclusions of the qualified keywords.

4.2 Important factors in search engine optimization

The preliminary idea of the research was originally to identify and survey SEO experts in order to find the most important factors of SEO. As we were searching for SEO experts, we stumbled across SEOMoz, which had already completed a full study on the same matter. After shortcomings in attempting to contact SEO experts, we decided to investigate further into the earlier findings found by SEOMoz (see appendix). This study was more comprehensive and detailed than a study we could have performed ourselves. Therefore, we decided to shift our idea from identifying the SEO factors, towards analyzing real search results and keywords which are of great value to Funnelwebs for their SEO activities. Funnelwebs commissioned the research due to their need for research on SEO and analyses of possible keywords to compete for in the search engines.

The focus of the research was to identify and study relevant Finnish keywords for Funnelwebs to search engine optimize. In order to realize how competitive the keywords were, it was necessary to uncover the most important factors. With a set of criteria, based on the most significant SEO factors, it was possible to measure and understand the level of competition for the keywords.

SEOMoz is a provider of tools, SEO services and educational resources for people and companies engaged in Internet marketing and SEO activities. According to a study made by SEOMoz, which was carried out by 37 of the world's leaders in organic SEO, a list of the most important factors that embraced Google's ranking algorithm was comprised. The respondents rated each factor on a scale of one to five, with five being the most important and one the least important. A summary of the most important factors carried out by SEOMoz can be found in the appendix of this study.

In this study, out of all the factors that were seen to have an impact on SEO, the five strongest positive factors were used as guidelines to create the criteria for analyzing keyword competition. Positive factors are ones which sustain or boost the position of a website in search engine results pages (SERPs), whereas negative factors are ones which penalize or hamper a website from performing well in SERPs. Due to the lack of time and resources, the research of the keyword competition had to be concentrated only on the most significant factors. The decision was made to take the five most important positive factors and exclude the negative factors.

This study's focus is not upon the mechanics involved in technical implementation of SEO, it is focused on the purpose of SEO from a business perspective. Nonetheless one must understand that to utilize these SEO factors correctly and implement SEO to a website, technical changes to the anatomy of the website are required. Websites are made up of one or more web pages. SEO for a keyword must focus on one web page at a time. Web pages are built with Hypertext Markup Language (HTML). HTML is the programming specification of how web pages must be written, in order to be understood and displayed properly by computers. (DeBolt, V. 2007, 3)

Like a human being, a web page has a head and a body. The head contains information about the website, including the title of the page. Google uses the title of the page as the title of the web page's listing in SERPs. Including a keyword in the title of the page is considered to be one of the most influencing SEO factors. The head can also include description and keywords Meta tags, which are used for providing search engines with more details about the web page. The description Meta tag should include a description of the web page, and the keywords Meta tag should contain keywords related to the content of the web page. Search engines may use the description from the Meta tag as the main part of the web page's listing in SERPs. The keywords Meta tag

is not of great importance, since many search engines do not use it any more. (Kent, P. 2008, 110). The body section of a web page contains the content, for example the text and images which are displayed to the user. The inclusion of the keyword in the body section of the web page is also an important SEO factor. The body section of a web page can include both headings and paragraphs.

The other SEO factors covered in this study factors do not involve technical changes to the web page. These factors are in relation to issues like back links (inbound links to the web page) and domain age (the age of the website).

The top five positive SEO factors (not necessarily in order of importance):

- Keyword Use in Title Tag
- Keyword Use in Body Text
- Link Popularity
- Anchor Text of Inbound Link
- Age of Site

With knowledge of these five fundamental factors, we developed a more comprehensive criterion to perform the keyword research. These criteria analyze the following ten aspects of a web page:

- Position
- Web page Address (URL)
- Domain Age (DA)
- Page Rank (PR)
- Back links (BL)
- Keyword in Title (inTitle)
- Keyword in URL (inURL)
- Keyword in Description (inDesc)
- Keyword in Header Tag (inHead)
- Traffic Travis Score (TTS)

The criteria are measured by a simple method, which creates an individual table for each keyword. This new method has been coined, by the authors of this research, as a SERP Matrix and will be explained in detail in the Keyword Research Chapter.

Although the top negative factors for SEO were also presented in the research by SEOMoz, the negative factors were considered to be less important to this research of SEO as a whole. The negative factors of SEO are not of great importance, since this study focuses on analyzing the competition, which includes only web pages listed on the first page of Google for the selected popular keywords. These top ranking websites were not being penalized for negative factors; otherwise, they would likely not have been listed among the first page results. For this reason, it was decided to exclude the study of the negative factors to this research.

Though the competitors' web pages were not analyzed for these negative factors, it was important to check Funnelwebs' own website to make sure none of these main negative factors were occurring. The five main negative factors are discussed below.

1. **Server is Often Inaccessible to Bots:** All of the websites listed in this research (including Funnelwebs.com) were accessible to the search engine crawlers (bots); therefore, this negative factor was ignored during this research.
2. **Content Very Similar or Duplicate of Existing content:** Each webpage has been scanned for duplicate content with Copyscape (2009). Copyscape is a tool which checks the Internet for websites with duplicated or plagiarized content. Each result came back negative for duplicate content or plagiarism.
3. **External Links to Low Quality/Spam Sites:** Funnelwebs.com had no extra links to spam site. All external links from Funnelwebs.com were directed only to Funnelwebs websites made by Funnelwebs; they are linking to these websites to show them as references of their work.
4. **Duplicate Title/Meta Tags on Many Pages:** Each of Funnelwebs' web pages have been scanned for duplicate title/meta tags. None of the pages had duplicate titles, descriptions, or keywords in the head of the web pages. This was checked manually by viewing the head section of each web page.
5. **Overuse of Targeted Keywords (Stuffing/Spamming):** By using Traffic Travis Page Analysis, it was easy to analyze the overuse of targeted keywords. Traffic

Travis is a helpful SEO tool that indicates all the issues with on-page SEO factors.

Funnelwebs' website was examined and it did not have any correlations to these negative factors. Still, it was important to ensure that there were no negative factors, which could hinder SEO performance.

5 KEYWORD RESEARCH

This research has been commissioned by Funnelwebs; a web and media company based in Helsinki, Finland. Funnelwebs intends to utilize the results and recommendations of this research in order to develop its search engine marketing strategy. Furthermore, the research will be applied to support the techniques used in SEO.

Funnelwebs has provided specific minimum requirements for a keyword to be eligible for consideration of optimization. The keyword, in regards to this research, can be referring to either a single word or keyword term that consists of more than one word.

Keyword Requirements (by Funnelwebs):

1. At least 5 searches per day
2. Conveys the nature of someone looking for web design services
3. Potential to attain one of the first 5 positions on Google's first results page

Funnelwebs wants to optimize for Finnish keywords, since the business is focusing on targeting companies in Finland. The following section lays out the first stage of the research and discusses the selection of these Finnish keywords.

5.1 Identify and select potential keywords

The first stage involved searching for and identifying potential Finnish keywords. This was completed with the Google Keyword Tool. The Google Keyword Tool allows one to enter a keyword from which it then generates a list of related keywords, as well as data on their average monthly search volume.

Table 1. Ten Keyword synonyms for Kotisivut (Google Keyword Tool 2009)

Keyword	Searches
kotisivut	266
www sivut	16
omat kotisivut	19
kotisivut com	13
kotisivut yritykselle	24
tee kotisivut	6
edulliset kotisivut	7
Internet sivut	13
www sivu	16
web sivut	9

Searches = Global Monthly Search Volume/30 [Exact Match]

Table 1 lists the keywords that were unveiled using the Google Keyword Tool. From the generated list of suggested keywords, we filtered out any keywords which received fewer than five searches per day. A list of ten potential keywords was compiled which met the search volume requirement. These keywords were discovered whilst searching for synonyms for the keyword *Kotisivut*, which itself is a major potential keyword, due to its high daily search volume.

Title competition (TC) is the approximate number of indexed websites that have the keyword included in the web page's title tag. TC provides a rough idea of how competitive a keyword is, by showing how many indexed websites have the keyword in the website's title.

Table 2. Title Competition for each potential keyword

Keyword	Searches	TC
kotisivut	266	420000
www sivut	16	13000
omat kotisivut	19	3670
kotisivut com	13	10200
kotisivut yritykselle	24	395
tee kotisivut	6	6
edulliset kotisivut	7	86
Internet sivut	13	4460
www sivu	16	23700

web sivut	9	3200
-----------	---	------

Table 2 shows TC for the keyword synonyms of *Kotisivut*. All websites with the keyword in the title could be considered as competitors. TC therefore provides an estimated indication of how many websites Funnelwebs will need to compete against for the keyword. TC is derived by using the *allintitle* command on Google. By placing double quotes (" ") around the keyword we received the results for the exact keyword term in title only. (Blachman, N. et al. 2008).

Table 3. Removal of any keywords that did not convey the character of a potential website buyer

Keyword	Searches	TC
kotisivut	266	420000
www-sivut	16	13000
omat kotisivut	19	3670
kotisivut.com	13	10200
kotisivut yritykselle	24	395
tee kotisivut	6	6
edulliset kotisivut	7	86
Internet sivut	13	4460
www-sivu	16	23700
web sivut	9	3200

Table 3 shows omitted keywords crossed out because they were not relevant and did not convey the character of a potential website buyer. The keyword *Kotisivut* (Finnish for *Homepages*) is a slightly vague term; however, due to its high search volume and potential to drive over 150 visitors a day to the website, assuming first position gets 56.36% of clicks as according to Eye Tracking study results of 2006 (Online Marketing Research 2006), we decided to qualify it as a potential keyword.

Table 4. Three suitable keywords for Funnelwebs to consider for search engine optimization

Keyword	Searches	TC
kotisivut	266	420000
edulliset kotisivut	7	86
kotisivut yritykselle	24	395

Table 4 shows the keyword research results which derived three suitable keywords. The table shows the 3 qualified keywords with their daily search volume and TC. The table indicates that there is an association between the number of searches and TC. The higher the search volume is (popularity of the keyword) the higher the competition is also.

5.1.1 SERP Matrices

To facilitate and to understand what is involved in taking a web page's position on the Search Engine Results Pages (SERPs), a constructed keyword research method to measure, analyze and display the competition would be necessary. This research method has been created by thoroughly analyzing the websites which are currently on the top positions; one can find what is required to obtain a top position on Google. A SERP Matrix enables one to easily view, compare and analyze keyword competition in an unambiguous manner. It reveals the most important factors that have caused the websites to rise to the top of the results. This method assisted in determining whether or not it is possible for Funnelwebs to drive their website above their competitors' websites. To display the finding of each keyword a table is produced, using this method of analyzing keyword competition based on the first page results is called a SERP Matrix. The analysis inspects in detail the major factors that influenced a web page's position on Google.

5.1.2 SERP Matrix Steps

The SERP Matrix provides detailed data which proves whether or not the keyword is or is not too competitive. Below are the four steps required to complete a SERP Matrix:

1. Search for the keyword on Google in order to find what web pages are listed on the first results page.
2. Check the domain age of each organic web page.
3. Check the Google PageRank of web page.
4. Examine each web page to see if the keyword is included in different elements of the page itself.

The first step of each SERP Matrix involves executing a Google search for the keyword to be analyzed. The first page organic results can begin to be individually examined. This method inspects both domain and page related elements. The theoretical part of this dissertation has explained what the fundamental drivers of a web page's position in the search engine are. A column for each SEO factor is included in the SERP Matrix, each row represents one of the first page results; its position is specified. Each keyword requires a SERP Matrix of its own. The SERP Matrices display the results of each keyword, in a table which is easy to measure and compare.

The SERP Matrix analyses the following factors:

1. Domain Analysis – Analyzes the URLs, checking the web page's Domain Age.
2. Page Analysis – Each web page result is checked to see if the keyword is in the web page's title, URL, Page Description and Header Tags. 'Y' indicates that the keyword is included in the element, whereas 'N' indicates that the keyword is not included. The web page's PageRank is also checked for each listing.

The SERP Matrices analyze the competition and determine what is required to obtain a top position; which completes the second and third stages of the research. Below each SERP matrix a potential comparison is included which compares Funnelwebs to the strongest five competitors of the keyword; this carries out the fourth stages of the research. Finally a keyword conclusion is included for each keyword with recommendations; this final step is the fifth stage of the research.

Definitions of the SEO factors which are included in each SERP Matrix:

Position (Pos)

The web page's position on the first page results of Google. I.E Position, 1 indicates that the website is in first on Google.

Web page Address (URL)

Formally known as Uniform Resource Locator, the URL is simply the web page's

address. Inclusion of the keyword in the URL (inURL) of each web page was checked. Y = Yes, N = No.

Domain Age (DA)

The age of a domain, acquired from the domain created date in the WHOIS records (Domain Age is rounded to the nearest year). In some cases domain information is not available to the public or is otherwise inaccessible, therefore the domain age was not always found; in such cases the result is marked with a hyphen. (Whois 2009)

Page Rank (PR)

An indicator of the overall quality according to Google, as determined by Google's PageRank algorithm. (PRChecker 2009)

Back links (BL)

The total number of external links pointing to the web page. This does not include any links from the website itself. Furthermore it only includes links directly to the specific web page, not the entire website. The tool used for this is Yahoo's Site Explorer (2009).

Keyword in Title (inTitle)

Whether the web page contains the keyword in the title tag. Y = Yes, N = No.

Keyword in URL (inURL)

Whether the web page URL contains the keyword. Y = Yes, N = No.

Keyword in Description (inDesc)

Whether the keyword included in the meta description tag. Y = Yes, N = No.

Keyword in Header Tag (inHead)

Whether the keyword appears in <h1>, <h2>, <h3> tags within the page content itself. Y = Yes, N = No.

Traffic Travis Score (TTS)

This was analyzed using Traffic Travis, a free SEO Software program which analyses any web page for a specific keyword or phrase. It gives a grade (scale from F to A+)

based on how well the web page is optimized for the keyword. The TTS is influenced by both keyword use in the heading and paragraphs of the body section of the web page. The research does not provide an exact figure of how many times the keyword is included in the web pages being analyzed; rather the TTS reveals the web page's level of relevance to the keyword. However the inclusion of the keyword in page headings is seen to have a great affect, therefore it was separately measured (inHead). In practice, Traffic Travis was also used to verify inTitle, inDesc and inHead.

5.2 Keyword One: kotisivut

Kotisivut receives 266 daily searches on Google (Google Adwords Tool), if Funnelwebs obtained the first position for this keyword it could expect 150 new visitors per day to its website assuming first position gets 56.36% of clicks as according to Eye Tracking study results of 2006 (Online Marketing Research 2006). These visitors can be assumed to be people who are likely to become potential customers, based on the fact that they are searching for the keyword *Kotisivut*, Finnish for Homepages. Currently Funnelwebs.com receives an average of fewer than 40 visitors per day (Google Analytics, 2009); therefore this could have a great impact on the amount of business Funnelwebs receives.

Table 5. SERP Matrix of the first 10 web pages listed for the keyword *kotisivut* on Google [referred on 30.7.2009]

Pos	URL	DA	PR	BL	inTitle	inURL	inDesc	inHead	TTS
1	kotisivuni.org/	2	3	308	Y	N	N	Y	B
2	www.kotisivut.com/	9	5	425856	Y	Y	Y	N	A
3	elisa.net/kotisivut/	8	6	6	Y	Y	N	N	C+
4	harrypotter.fi.warne...	8	0	17	N	N	Y	N	D+
5	www.suntuubi.com/	2	5	2460	Y	N	Y	N	B+
6	mariasivut.webs.com/	-	0	15	Y	N	N	Y	B
7	www.kotisivuja.net/	8	4	1950	Y	N	Y	N	B
8	www.jsmedia.fi/	3	4	1919	Y	N	Y	Y	B+
9	www.freewebs.com...	11	0	20	Y	N	N	Y	C+
10	www.geocities.com/...	13	3	13680	Y	N	N	N	C

The table above is the first SERP Matrix generated. It analyses the first 10 web pages listed when searching on Google for the keyword *kotisivut*.

As expected all of the first page results have back links. All but one of the first page results, have the keyword in the title of the web page. 50% of the first page results include the keyword in the page description. The majority of the first page results are websites that are 8 years of age or older, this supports the theory that domain age influences a web pages search engine position; Google gives preference to older websites.

The website in fourth position raises question to its relatively high position, it has no PR, nor does it have the keyword included the URL or the header tag, but it is still amongst the top five websites. Furthermore its Traffic Travis score was very poor. This result challenges the search engine optimization theory, since it breaks the logic in the results.

Apart from the website in fourth position, all other results show logic in their position. The fourth position could be explained as an outlier observation since it is the only result that deviates greatly from the rest of the top ten results in Google for the keyword *kotisivut* (Grubbs, F. 1969. p. 1–21).

Table 6. SERP Matrix and Keyword Comparison for the keyword *kotisivut* on Google [referred on 30.7.2009]

Pos	URL	DA	PR	BL	inTitle	inURL	inDesc	inHead	TTS
#	funnelwebs.com/fi	2	4	52	Y	N	Y	Y	A+
1	kotisivuni.org/	2	3	308	Y	N	N	Y	B
2	www.kotisivut.com/	9	5	425856	Y	Y	Y	N	A
3	elisa.net/kotisivut/	8	6	6	Y	Y	N	N	C+
4	harrypotter.fi.warne...	8	0	17	N	N	Y	N	D+
5	www.suntuubi.com/	2	5	2460	Y	N	Y	N	B+

The PageRank of Funnelwebs.com/fi is already higher than the website in first position. Furthermore if the back links (BL) was increased to 308, the PageRank should eventually increase, making Funnelwebs' position stronger.

Funnelwebs.com could potentially (in theory) acquire a first page position for the keyword *kotisivut*. This keyword carries considerable weight in competition, since the average domain age of the first page results is over 7 years. The website in second position has DA of 9 and PR of 5, along with over 425000 BL, furthermore the keyword is in fact the main part of the URL and it has a TTS of A. The amount of back links appears to be a great threat to any new entrants considering competing for this keyword, but this website is not in the first position which exposes weakness of the quality / relevance of BL. Quality refers to the PR of a back link, whereas relevance refers to the use of the keyword in the anchor text of the back link.

Due to the fact that the website in first position has only 308 BL, suggests that the mass amount of BL which the second listing has, do not affect its position enough to take first place. The website in first position also has a lower PR, DA and TTS. This suggests that the 308 BL which the first listing has are of higher quality / relevance and prove to be sufficient to hold first position. The reason the second website is not in first position appears to be because the anchor texts of the back links are probably not relevant to the keyword or do not contain the keyword. The SERP Matrix does not check the anchor texts of back links for the keyword, nor does it check the PR of any of the back links, it only calculates how many back links there are to the page. The SERP Matrix fails to measure the quality of BL, since quality may be more important than quantity. It is not practical nor is there enough time or resources to analyze thousands, possibly millions of back links for each listing.

Therefore based on general SEO theory we must assume, if a website has fewer back links and a higher position, it is due to those fewer back links being of higher value; for instance having higher PR and better relevance to the search term. For example if a website has 1,000,000 back links which say *Cheap Coffee Website*, all those 1,000,000 back links will not affect that web page's search engine position for a keyword like *Kotisivut*, simply because the link texts are not relevant. For this reason we can move the focus off the second result and onto the first result directly. In practice if Funnelwebs wants to take first place for this keyword, it really only needs to focus on beating what is in first position. Therefore Funnelwebs does have a chance at getting a first position, because it beats the first position website on DA, PR, TTS, and beats or matches it on keyword use in all page elements (inTitle, inURL, inDesc, inHead).

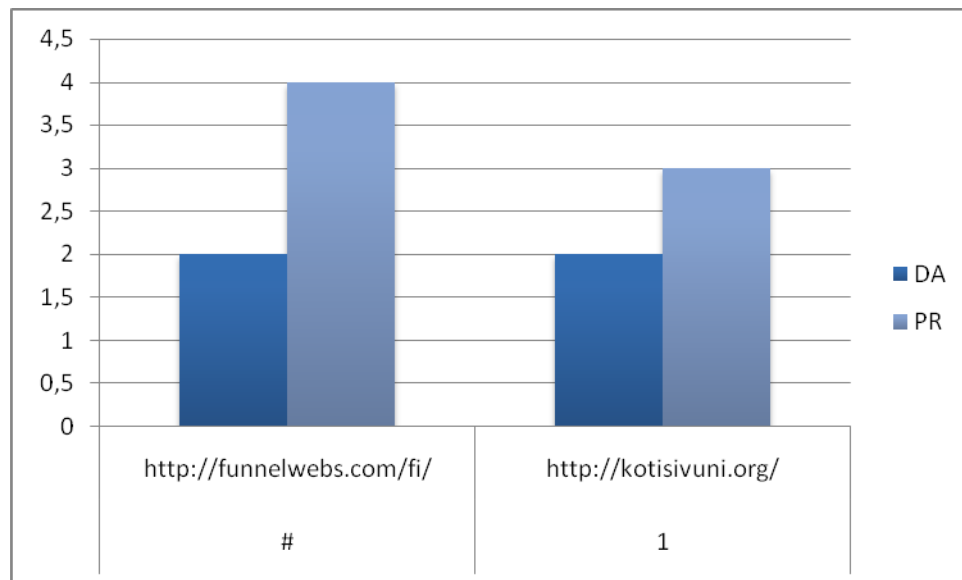


Figure 6. Comparison between the DA and PR of funnelwebs.com/fi/ and kotisivuni.org/.

If Funnelwebs can generate higher quality BL which include the keyword, it could take the first position; resulting in 150 new prospects per day. In order to aim for first position Funnelwebs will need to increase the amount of BL to their Finnish home page to a number greater than 308, whilst making sure the BL are of as high quality / relevance as possible and the content would need to be optimized to achieve nothing less than a TTS of A+.

5.3 Keyword Two: *edulliset kotisivut*

Edulliset Kotisivut receives 7 daily searches on Google; far fewer searches than the keyword *Kotisivut*. If Funnelwebs obtained the first position for this keyword it could only expect 4 to 5 new visitors per day (Online Marketing Research 2006). These visitors would be few in number, however these seekers are likely to be visitors who are seriously considering purchasing a new website, since the keyword *Edulliset Kotisivut* is Finnish for *Affordable Homepages*.

Table 7. SERP Matrix of the first 10 web pages listed for the keyword *edulliset kotisivut* on Google [referred on 30.7.2009]

Pos	URL	DA	PR	BL	inTitle	inURL	inDesc	inHead	TTS
-----	-----	----	----	----	---------	-------	--------	--------	-----

1	www.edullisetkotisiv...	-	0	7	Y	Y	Y	N	B
2	edullisetkotisivut.net/	-	0	0	Y	Y	Y	N	C
3	www.websamiel.net/...	4	2	0	Y	N	N	N	C
4	www.obra.fi/hinnat.h...	2	4	0	Y	N	Y	Y	C+
5	www.edullinenkotisi...	-	0	4	Y	N	Y	Y	B+
6	www.codepic.fi/	-	4	2419	Y	N	N	N	D
7	www.tanfor.fi/	8	3	125	Y	N	N	N	C+
8	www.haprica.fi/	-	3	291	Y	N	N	N	C
9	www.ramasa.fi/	3	4	3689	N	N	N	N	D
10	www.tobastudios.c...	5	0	0	N	N	Y	N	C+

The competition for this keyword is very low since the top 2 results have 0 PR and unavailable DAs. PR and DA are two major factors; these top web pages express no threat. The web pages listed in positions 2 – 4 all have no BL. The first two web pages are the only ones to include the keyword inTitle, inURL and inDesc; this proves clearly why they are first. The mere inclusion of the keyword inTitle, inURL and inDesc is not enough to hold a top position, if Funnelwebs begins to compete with its higher DA, PR, BL and TTS.

Table 8. SERP Matrix and Keyword Comparison for the keyword *edulliset kotisivut* on Google [referred on 30.7.2009]

Pos	URL	DA	PR	BL	inTitle	inURL	inDesc	inHead	TTS
#	funnelwebs.com/fi	2	4	52	Y	N	Y	Y	A+
1	www.edullisetkotisiv...	-	0	7	Y	Y	Y	N	B
2	edullisetkotisivut.net/	-	0	0	Y	Y	Y	N	C
3	www.websamiel.net/...	4	2	0	Y	N	N	N	C
4	www.obra.fi/hinnat.h...	2	4	0	Y	N	Y	Y	C+
5	www.edullinenkotisi...	-	0	4	Y	N	Y	Y	B+

Funnelwebs can acquire first position for this keyword simply by optimizing its content. Additional back links with *edulliset kotisivut* in or as the anchor text would certainly secure top position. However Funnelwebs already has DA and PR back links would not even be required. The question for this keyword lies not on the feasibility of gaining top position, but on whether or not it is worthwhile from a SEO point of view; the keyword has low search volume of just 7 searches per day.

5.4 Keyword Three: *kotisivut yritykselle*

Kotisivut yritykselle receives 24 daily searches on Google; 242 fewer searches than the keyword *Kotisivut* but still 17 more searches than *Edulliset Kotisivut*. If Funnelwebs obtains the first position for this keyword it could expect an average of 14 new visitors per day to the website (Online Marketing Research 2006). *Kotisivut yritykselle* is Finnish for *Homepages for a business*. The nature of this keyword is highly relevant and valuable, since those searching for *Kotisivut Yritykselle* are likely to be legitimate business prospects seeking a website solution.

Table 9. SERP Matrix of the first 10 web pages listed for the keyword *kotisivut yritykselle* on Google [referred on 30.7.2009]

Pos	URL	DA	PR	BL	inTitle	inURL	inDesc	inHead	TTS
1	www.wds.fi/	-	4	471	Y	N	Y	Y	B
2	www.z-media.fi/	2	4	1780	Y	N	N	N	C
3	www.edullinenkotisi...	-	0	6	Y	N	N	Y	C+
4	www.putteri.fi/	3	4	4450	Y	N	N	Y	B
5	www.uranus.fi/hyoty...	6	0	0	Y	N	N	N	D+
6	www.paavilainen.net...	7	1	0	N	N	N	N	D+
7	www.tj-design.fi/koti...	8	3	0	Y	N	N	Y	C
8	inspiroi.net/	2	0	16	N	N	N	N	D
9	www.halkeama.com/...	2	3	1	Y	N	N	Y	C+
10	www.vihtori.fi/kotisi...	3	4	10	Y	N	N	N	C

All of the competing web pages have a DA of 2 or more, or otherwise not determined. The DA was not able to be determined with the instruments used. This remains as an unknown factor and could hinder Funnelwebs' SEO efforts, if in fact it has a high DA which we could not find. The number of BL is also relatively high and a clear threat. However there are no web pages listed with a PR greater than 4, therefore Funnelwebs can match the competitors on PR.

Table 10. SERP Matrix and Keyword Comparison for the keyword *kotisivut yritykselle* on Google [referred on 30.7.2009]

Pos	URL	DA	PR	BL	inTitle	inURL	inDesc	inHead	TTS
#	funnelwebs.com/fi	2	4	52	Y	N	Y	Y	A+

1	www.wds.fi/	-	4	471	Y	N	Y	Y	B
2	www.z-media.fi/	2	4	1780	Y	N	N	N	C
3	www.edullinenkotisi...	-	0	6	Y	N	N	Y	C+
4	www.putteri.fi/	3	4	4450	Y	N	N	Y	B
5	www.uranus.fi/hyoty...	6	0	0	Y	N	N	N	D+

Obtaining first position for this keyword would not be easy; it would require a lot of new back links. However the benefits could be great due to the quality of the keyword and its relevance to the industry. Three of the first top five web pages have many more back links, it will not be possible for Funnelwebs to obtain a top position without increasing its back links, unless the back links of competing web pages are not relevant to this keyword. The relevance and quality cannot be seen from this analysis.

The web page in first position is strong in regards to keyword use on page (inTitle, inDesc, inHead) as well as a TTS of B, which proves the web page's content is relevant to the keyword. The website in second position is also quite strong since it has 1780 back links as well as a PR of 4. Its weakness lies in the fact that the keyword is not included in the description (inDesc) nor is it included in the header (inHead). These factors show it is not optimized for the keyword, and this is supported by the fact that it has a TTS of C; therefore its content is not relevant to the keyword.

5.5 Keyword Recommendations

The results of the research have been weighed out. Each keyword has its pros and cons in terms of competition and search volume. This section summarizes the results of our keyword research with recommendations on whether Funnelwebs should consider beginning SEO and competing for a top position for any of the three selected keywords.

Table 11. Potential new visitors and Challenge Scale (1-3) for obtaining the first position

Keyword	Searches	New Visitors	Challenge
edulliset kotisivut	7	4	1
kotisivut yritykselle	24	14	2
kotisivut	266	150	3

In Table 11, the keywords have been listed with the number of potential new visitors Funnelwebs could receive if they were to obtain the first position for each respective keyword. It is evident that the more searches a keyword receives, the more likely it is to have greater competition. Funnelwebs has the ability to do in-house SEO with techniques that they have learned from past experience in addition to the new research provided by this study. With this information available on SEO, Funnelwebs would not need to outsource their SEO efforts. Hence, the main impediment to Funnelwebs would be due to a lack of time. Taking into consideration the amount of time required to achieve these positions, we included a Challenge Scale from one to three, with number one being the easiest and three being the hardest top position to obtain.

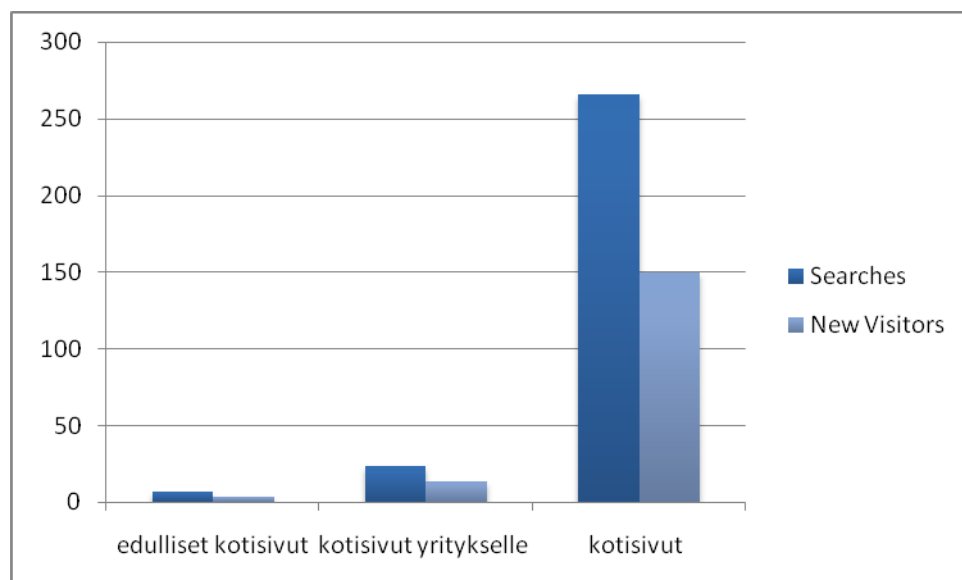


Figure 7. Comparison of the number of searches and potential new visitors for the selected three keywords

Edulliset kotisivut would not require much optimization, since the competition is very low. While this keyword is intriguing due to its low competition, it falls short of on the number of new visitors Funnelwebs would obtain. The criteria given by Funnelwebs for selecting the keywords required a minimum of 5 searches a day. *Edulliset kotisivut* receives 7 searches a day and potentially provides only 4 new visitors a day. This is not a large number of new visitors. Therefore, the recommendation given to Funnelwebs advises Funnelwebs' homepage to compete for a keyword with more searches. Bearing in mind DA and PR, Funnelwebs' homepage proved to be of strong potential according to the SERP Matrix Keyword Comparisons, even now before op-

timization for the keyword has begun. Also, the keyword *Edulliset kotisivut* refers to Affordable Homepages, which is very likely to bring visitors who are looking for the cheapest solutions. Funnelwebs does not target businesses who are seeking the cheapest solution, but rather a service of high-end quality.

Kotisivut yritykselle receives three times more searches than *Edulliset kotisivut*. The competition for *Kotisivut yritykselle* is higher than *Edulliset kotisivut* but it is not unachievable. Funnelwebs' homepage could rise above its competitors by building more relevant / high quality back links. This niche keyword, *Kotisivut yritykselle* (Homepages for Business) is also more specific and relevant to Funnelwebs than the single keyword *Kotisivut* (Homepages). Therefore, the recommendation for Funnelwebs is to target this keyword for the immediate future, since it receives a decent number of searches (24 per day) and is evidently more associated and more obtainable to Funnelwebs than its counterpart *Kotisivut*.

For the keyword *Kotisivut*, it is clear that the prospect of receiving 150 new visitors a day to a website has driven many web design companies to optimize specifically for this keyword. According to our research, *Kotisivut* would require a great deal of back link building as well as acquiring a greater PR. Although this could be achieved over a longer period of time and is to be considered as a recommendation due to the number of new visitors, it is not a short term solution. It would be a great investment which could be carried out in the future, after Funnelwebs has successfully achieved a greater PR and gained a higher DA. By achieving these criteria, Funnelwebs would be in a stronger position to challenge the top positions for the keyword *Kotisivut*.

6 CONCLUSION

The Internet has been discussed as an effective marketing medium, with emphasis on the evolution of marketing concepts and the Internet's effect on business. The significance of search led to the key topic of SEO as a marketing tool. The practical research of this study has produced valuable information for Funnelwebs to utilize in their marketing activities. The new keyword research method, SERP Matrix, was one of the foremost accomplishments of this study.

Marketing has always been strongly connected to technology. When technological advancements such as the Internet have been introduced, businesses begin to take advantage of such innovation. In a Holistic Marketing era, marketing is no longer merely about production, selling and delivering. Relationship marketing is one of the dominant concepts; creating long term relationships and partnerships is at the core of a holistic marketing strategy. By building relationships between companies and their stakeholders, the Internet has become a valuable marketing medium to business.

Searching on the Internet is a part of daily consumer life. Search is revealing what people are looking for. Businesses are benefiting from using the Internet to collect and analyze information for market research purposes. Realizing that websites are not found on the Internet automatically is the key to understanding why SEO is a useful marketing tool for business. The theoretical aim of this study did not deviate from its anticipated path.

A study is always constrained by the resources available and the data collection methods used. Each data collection method has its benefits and its shortcomings. This study gathered data from accepted and acknowledged literature and previous research. Key factors that were taken into consideration when collecting data included analyzing the content's relevancy and reliability. The ability to measure and evaluate the data is the largest threat to the research itself. Limiting the biases of the researchers and their attitudes towards the company were vital to the consistency of this research. According to the Hawthorne's (2009) research, the Hawthorne effect is a concern in research. The researchers and the people involved in the research are affected by stimulants, such as being excessively positive as well as aiming to achieve socially desirable responses and results.

By the means of quantitative research methods, this study performed extensive keyword research and thorough competition analyses. It also provided insightful recommendations, which were based upon the extended exploration of the main SEO factors. The possibility of misinterpretation existed; therefore, careful selection of the data collected and comparisons were conducted. However, this did not eliminate all the misinterpretations since interpretations are subjective. Results can always be argued and interpreted differently by contrasting viewpoints. Consequently the results of the research cannot be perceived as absolute. The results should rather be understood

as interpretations that can advance the understanding of the Internet marketing medium and SEO as a marketing tool.

Beneficial recommendations and new information from this study have been presented to Funnelwebs. This study will be used by the company to reach higher rankings for the newly found keywords on Google. Should Funnelwebs succeed in the utilization of these results, the company may use this knowledge to offer SEO services. The SERP Matrix has provided the company with an easy to repeat and logical systematic approach to analyze keyword competition. The development of the SERP Matrix is an accomplishment and a successful result of this study. Apart from Funnelwebs utilizing the results of this study for their SEO activities, this study has also exposed the need for further marketing research with focus on the following topics:

- To devise a process of integrating SEO into a company's marketing plan
- To formulate methods of calculating the return on investment of SEO
- To study the behaviour of consumers (website visitors) from organic search
- To develop academic SEM models and strategies
- To examine SEO factors of other popular search engines

This study expresses how the Internet, as a marketing medium, is offering an opportunity for companies to expand their target groups, in addition to improving relations between stakeholders. SEO serves to expand and increase the exposure of a company online and thus, this study's conclusions uphold the view that it is not the website alone that is paramount, but rather the company's position on search engines such as Google.

BIBLIOGRAPHY

Books

Bidgoli, H. 2004. The Internet encyclopedia. New York. John Wiley & Sons.

DeBolt, V. 2007. Mastering Integrated HTML and CSS. New York. John Wiley & Sons.

Denzin, N. 1978. The research act: A theoretical introduction to sociological methods. New York. McGraw-Hill.

Frain, J. 1999. Introduction to marketing. 1 edition. Florence, Kentucky. Cengage Learning Business Press.

Glesne, C. & Peshkin A. 1992. Becoming qualitative researchers: An introduction. New York. Longman Publishing Group.

Godin, S. 1999. Permission marketing: turning strangers into friends, and friends into customers. New York. Simon & Schuster.

Hagel, J. III & Armstrong, A.G. 1997. Net Gain: Expanding Markets through Virtual Communities. Boston, Massachusetts. Harvard Business School Press.

Kalakota, R. & Robinson, M. 1999. e-Business: Roadmap for Success. New York. Addison Wesley Information Technology Series.

Kent, P. 2008. Search Engine Optimization for Dummies. New York. John Wiley & Sons.

Kerin, R., Hartley, S., Rudelius, W. 2004. Marketing: The Core. New York. McGraw Hill /Irwin.

Kotler, P. & Keller, K. 2006. A Framework for Marketing Management. 3rd edition. New Jersey. Prentice Hall.

Langville A. & Meyer D. 2006. Google's PageRank and Beyond: The Science of Search Engine Rankings. New Jersey. Princeton University Press.

Lauterborn, R. 1990. New Marketing Litany: 4 Ps Passe; C words take over", Advertising Age. Chicago, Illinois. NTC Publishing Group.

Ledford, J. 2007. SEO: Search Engine Optimization Bible. New York. John Wiley & Sons.

Luengo-Jones, S. 2001. All to One: The Winning Model for Marketing in the Post Internet Economy. London. McGraw Hill.

- Muijs, D. 2004.** Doing quantitative research in education with SPSS. London. SAGE Publications Ltd.
- Nielsen, J. 2000.** Designing Web usability: the practice of simplicity. Indianapolis, Indiana. New Riders Publishing.
- Pakroo, P. & Caputo C. 2008.** The Small Business Start-Up Kit. 7th edition. Berkeley, California. Addison-Wesley Professional.
- Parker, R. 2000.** Relationship Marketing on the Internet, Holbrook. Massachusetts. Adams Media Corporation.
- Peck, H., Christopher, M., Payne, A. 1999.** Relationship marketing: strategy and implementation. Oxford, United Kingdom. Reed Educational and Professional Publishing Ltd.
- Peppers, D. & Rogers, M. 1997.** Enterprise One to One. London, United Kingdom. Broadway Business.
- Pinson, L. 2001.** Anatomy of a business plan. New York. Dearborn Trade Publishing.
- Potts, K. 2007.** Web Design and Marketing Solutions for Business Websites. New York. Springer-Verlag New York Inc.
- Ramos, A & Cota, S. 2008.** Search Engine Marketing by Andreas Ramos. New York. McGraw-Hill Osborne Media.
- Rognerud, J. 2008.** Ultimate guide to search engine optimization. New York. Entrepreneur Media, Inc.
- Sandhusen, R. 2008.** Marketing. 4th edition. Happaage, New York. Barron's Educational Series, Inc.
- Sterne, J. 1998.** World Wide Web Marketing: Integrating the Web into Your Marketing Strategy. New York. John Wiley & Sons Inc.
- Ward, H. 2000.** Principles of Internet marketing. New York. South-Western College Publishing.
- Weill, P. & Vitale, M. 2001.** Place to Space: Migrating to Ebusiness Models. Boston, Massachusetts. Harvard Business Publishing Corporation.

Electronic sources

- Allainet, Inc 2008.** How SEO works: Search Engine Optimization Basics. [referred 02.08.2009] Available in www-format:
<URL:<http://www.howseoworks.com/>>.

Avtec Media Group 2007. Search Engine Statistics. [referred 08.08.2009] Available in www format:
<URL: <http://avtecmedia.com/Internet-marketing/Internet-marketing-trends.htm/>>.

Blachman, N., Bergson-Michelson, T., Peek, J. 2008. Google Guide. Making search even easier. [referred 14.9.2009] Available in www-format:
<URL: http://www.googleguide.com/advanced_operators_reference.html>.

Boswell, W. 2009. What is Web Search? A Look at the Definition of Web Search. [referred 26.7.2009] Available in www-format:
<URL: http://websearch.about.com/od/searchingtheweb/qt/web_search.htm>.

Broder, A. 2002. A taxonomy of web search. IBM Research. [referred 02.08.2009] Available in pdf-format:
<URL:<http://www.sigir.org/forum/F2002/broder.pdf>>.

Business week 2001. Commentary: Amazon + Wal-Mart = Win/Win. [referred 08.08.2009] Available in www format:
<URL: http://www.businessweek.com/magazine/content/01_12/b3724066.htm/>.

Consumer Reports 2007. Consumer reports: online retailers better than walk-in stores for electronics shopping. [referred 11.09.2009] Available in www format:
<URL:<http://www.consumerreports.org/cro/cu-pressroom/pressroom/archive/2007/11/0711-eng0711ele.htm/>>.

Copyscape 2009. Plagiarism Checker. [referred 11.09.2009] Available in www format:
<URL: <http://www.copyscape.com/>>.

Escalate Media LP. 2006. What SEO Isn't. [referred 02.08.2009] Available in www-format:
<URL: <http://blog.v7n.com/2006/06/24/what-seo-isnt/>>.

EyeTracking Study 2005. Did-it, Enquiro, and Eyetools Uncover Google's Golden Triangle. Vocus PRW Holdings, LLC. [referred 02.08.2009] Available in www-format:
<URL: <http://www.prweb.com/releases/2005/03/prweb213516.htm/>>.

Garner, R. 2008. A Framework for Enterprise Search Engine Marketing Strategy. [referred 02.08.2009] Available in www-format:
<URL:http://www.mediapost.com/publications/index.cfm?fa=Articles.showArticle&art_aid=85941>.

Google Analytics 2009. Enterprise-class web analytics made smarter, friendlier and free. Google Inc. [referred 02.08.2009] Available in www-format:
<URL: <http://www.google.com/analytics/>>.

Google Keyword Tool 2009. Where does the Search-based Keyword Tool derive its data from? [referred 26.7.2009] Available in www-format:
<URL:<http://www.google.com/support/sktool/bin/answer.py?hl=en&answer=11710>>.

Google Webmasters 2009. Webmasters/Site owners Help. Google Inc. [referred 02.08.2009] Available in www-format:
<URL: <http://www.google.com/support/webmasters/>>.

Gyöngyi, Z., Berkhin, P. H., Garcia, M., Pedersen, J. 2006. Link spam detection based on mass estimation. Technical report, Stanford University. [referred 21.7.2009] Available in pdf-format:
<URL: <http://infolab.stanford.edu/~zoltan/publications/gyongyi2006web.pdf>>.

Internet Advertising Bureau 2009. The online shopper and their customer journey. [referred 08.08.2009] Available in www format:
<URL: <http://www.iabuk.net/en/1/retailonlineshopper.html>>.

Internet Trends 2009. Internet Trends [referred 08.08.2009] Available in www format:
<URL: <http://www.Internettrends.org/>>.

Jansen, B. & Resnick M. 2005. Examining Searcher Perceptions of and Interactions with Sponsored Results. Workshop on Sponsored Search Auctions at ACM Conference on Electronic Commerce, Vancouver, BC, Canada. [referred 22.7.2009] Available in pdf-format:
<URL:http://ist.psu.edu/faculty_pages/jjansen/academic/pubs/jansen_ecommerce_workshop.pdf>.

Miniwatts Marketing Group 2009. Internet World Stats, Usage and Population Statistics. [referred 22.7.2009] Available in www-format:
<URL: <http://www.Internetworldstats.com/stats.htm>>.

Niu, Y., Wang, Y., Chen, H., Ma, M., Hsu F. 2006. A Quantative Study of Forum Spamming Using Context-based Analysis. Microsoft Research. [referred 22.7.2009] Available in pdf-format:
<URL:http://www.isoc.org/isoc/conferences/ndss/07/papers/quantitative_study_forum_spamming.pdf>.

Online Marketing Research 2006. Distribution of Clicks on Google's SERPs. [referred 08.08.2009] Available in www-format:
<URL: <http://www.seoresearcher.com/distribution-of-clicks-on-googles-serps-and-eye-tracking-analysis.htm>>.

Page, L. & Brin, S. 1998. The Anatomy of a Large-Scale Hypertextual Web Search Engine [referred 02.08.2009] Available in www-format:
<URL:<http://infolab.stanford.edu/~backrub/google.html> 1998>.

Perkins, A. 2001. The Classification of Search Engine Spam. [referred 26.7.2009] Available in www-format:
<URL:<http://www.seoconsultants.com/articles/1000/search-engine-spam.asp>>.

Pinkerton, B. 1994. Finding What People Want: Experiences with the Web Crawler. [referred 26.7.2009] Available in www-format:
<URL:<http://web.archive.org/web/20010904075500/http://archive.ncsa.uiuc.edu/SDG/IT94/Proceedings/Searching/pinkerton/WebCrawler.html>>.

PR Checker 2009. Checks a web page's PageRank value.

[referred 16.8.2009] Available in www-format:

<URL: <http://www.prchecker.info.html>>.

Privacy International 2007. A Race to the Bottom: Privacy Ranking of Internet Service Companies. [referred 08.08.2009] Available in www-format:

<URL: [http://www.privacyinternational.org/article.shtml?cmd\[347\]=x-347-553961/](http://www.privacyinternational.org/article.shtml?cmd[347]=x-347-553961/)>.

Rayport, J. & Sviokla, J. 1996. Exploiting the virtual value chain. The McKinsey Quarterly, vol. 1, Harvard Business Review, 20 -37. [referred 22.7.2009] Available in pdf-format:

<URL: <http://www.andreabiancalani.it/virtual.pdf>>.

Reed Business Information 2008. Search Engine Use on the Rise. [referred 12.08.2009] Available in www format:

<URL: <http://www.schoollibraryjournal.com/article/CA6588290.html/>>.

Ridings, C. & Shishigin M. 2002. PageRank Uncovered. Formerly Page Rank Explained [referred 02.08.2009] Available in pdf-format:

<URL: <http://www.voelspriet2.nl/PageRank.pdf>>.

Sempo 2009. Survey of SEM agencies and advertisers, Global results. [referred 02.08.2009] Available in pdf-format:

<URL: http://www.sempo.org/learning_center/research/2008_execsummary.pdf>.

Seomoz SEO Debate 2006. Black Hat vs. White Hat Search Spam Debate. [referred 02.08.2009] Available in www-format:

<URL: <http://www.seomoz.org/article/white-hat-black-hat/>>.

SEOnotepad 2009. Myth Of The Google Toolbar Ranking. SEO articles & Help – Search Engine Optimization & Marketing. [referred 02.08.2009] Available in www-format:

<URL: <http://www.seonotepad.com/search-engines/google-seo/myth-of-the-google-toolbar-ranking/>>.

Statistics Finland 2008. Online shoppers during the past three months in 2001 - 2008, per cent of population aged 16-74 years. [referred 26.7.2009] Available in www-format:

<URL: http://www.stat.fi/til/sutivi/2008/sutivi_2008_2008-08-25_kuv_003_en.html>.

Statistics Finland 2006. Share of Internet users grew during the year. [referred 26.7.2009] Available in www-format:

<URL: http://www.stat.fi/til/sutivi/2006/sutivi_2006_2006-12-11_tie_001_en.html>.

Sullivan, D. 2007. comScore: Google Wins Again & IE7 Doesn't Stop Microsoft's Slide. Third Door Media, Inc. [referred 02.08.2009] Available in www-format:

<URL: <http://searchengineland.com/comscore-google-wins-again-ie7-doesnt-stop-microsofts-slide-10268>>.

Sullivan, D. 2006. Hitwise Search Engine Ratings. Search Engine Watch. Incisive Interactive Marketing LLC. [referred 02.08.2009] Available in www-format:

<URL: <http://searchenginewatch.com/30999312006>>.

Tech Crunch. 2009. The Time Has Come To Regulate Search Engine Marketing And SEO. [referred 02.08.2009] Available in www-format:
<URL: <http://www.techcrunch.com/2009/07/13/the-time-has-come-to-regulate-search-engine-marketing-and-seo/>>.

Thorsten, J., Granka, L., Gay, G. 2004. Eye-Tracking Analysis of User Behavior in WWW Search. [referred 22.7.2009] Available in pdf-format:
<URL: http://www.cs.cornell.edu/People/tj/publications/granka_etal_04a.pdf>.

Web Development Community 2006. What SEO Isn't. [referred 08.08.2009] Available in www format:
<URL: <http://blog.v7n.com/2006/06/24/what-seo-isnt/>>.

Wikipedia 2009. Hawthorne Effect. Wikimedia Foundation, Inc. [referred 11.10.2009] Available in www-format:
<URL: <http://en.wikipedia.org/wiki/Hawthorne>>.

Wikipedia 2009. PageRank. Wikimedia Foundation, Inc. [referred 26.7.2009] Available in www-format:
<URL: <http://en.wikipedia.org/wiki/PageRank>>.

Wikipedia 2009. Search engine marketing. Wikimedia Foundation, Inc. [referred 26.7.2009] Available in www-format:
<URL: http://en.wikipedia.org/wiki/Search_engine_marketing>.

Wikipedia 2009. Web Crawler. Wikimedia Foundation, Inc. [referred 26.8.2009] Available in www-format:
<URL: http://en.wikipedia.org/wiki/Web_crawler>.

Wikipedia 2009. Website. Wikimedia Foundation, Inc. [referred 22.8.2009] Available in www-format:
<URL: <http://en.wikipedia.org/wiki/Website>>.

Whois 2009. Domain name search. [referred 22.8.2009] Available in www-format:
<http://whois.domaintools.com>

Yahoo 2009. Site Explorer. [referred 22.8.2009] Available in www-format:
<URL: <http://siteexplorer.search.yahoo.com>>.

Articles

Bardakci, A. & Whitelock, J. 2003. Mass-customisation in marketing: the consumer perspective Journal of Consumer Marketing vol. 20 issue 5, 463 – 479.

Berthon, P., Pitt, L., Watson, R. 1996. The World Wide Web as an Advertising Medium: Toward an Understanding of Conversion Efficiency. Journal of Advertising Research 1, 43-54.

- Breitenbach, C. & Van Doren, D. 1998.** Value-added Marketing in the Digital Domain: Enhancing the Utility of the Internet. *Journal of the Consumer Marketing*, 558-575.
- Buttle, F. 1996.** Relationship marketing. In *Relationship Marketing: Theory and Practice*. International Journal of Customer Relationship. Paul Chapman Publishing, 1-16.
- Chaffey, D. Mayer, R., Johnston, K., Chadwick, F. 2000.** *Internet Marketing: Strategy, Implementation and Practice*. Financial Times/ Prentice Hall, Harlow.
- Cohen, G. & Harris, L., 2003.** Marketing in the Internet age: what can we learn from the past? *Journal: Management Decision* MCB UP Ltd.
- David, P.A. 1989.** Computer and Dynamo: The Modern Productivity Paradox in a Not-Too-Distant Mirror. Stanford, CA. Center for Economic Policy Research.
- Dou, W., Nielsen, U., Tan, C. 2002.** Using Corporate Websites for Export Marketing. *Journal of Advertising Research*. September- October, 105-115.
- Fullerton, R. & Newett, T. 1988.** Modern Western Marketing as a Historical Phenomenon: Theory and Illustration. *Historical Perspectives in Marketing*. Lexington Books, 73 – 89.
- Geissler G. 2001.** Building customer relationships online: the Web site designers' perspective. *Journal of Consumer Marketing*, vol. 18 issue 6, 488 – 502.
- Gordon, R. 2000.** Does the New Economy match up to the great inventions of the past? *Journal of Economic Perspectives* vol. 3, issue 2, 16 – 23.
- Gori, M. & Witten I. 2005.** The bubble of web visibility. *Communications of the ACM* vol. 48, issue 3.
- Green, J., Caracelli, V., Graham, W. 1989.** Toward a Conceptual Framework for Mixed-Method Evaluation Designs. *Educational Evaluation and Policy Analysis*. Cornell University Research, 255-274.
- Grubbs, F. 1969.** Procedures for detecting outlying observations in samples. *Tecnometrics* 11/1-21.
- Gyöngyi, Z., Pedersen, J. 2004.** Combating web spam with trust rank. *VLDB*.
- Hoffman, D. and Novak, T. 1997.** A new Paradigm for Electronic Commerce. *The Information Society, Special Edition on Electronic Commerce*, vol. 13, 45-59.
- Jardine, L. 1999.** The Future Began in 1455. *Edition: The Spectator*, 16th October.
- Keith, R.J. 1960.** The Marketing Revolution. *Journal of Marketing*, vol. 24. January, 35-38.
- Kummerow, M. 2000.** Graaskamp on Research Methods.. *Essays in Honor of James A. Graaskamp: Ten Years After*. Boston, Kluwer Academic Publishers vol.6.

Nadler, D. & Tushman M. 1999. The organization of the future: Strategic imperatives and core competencies for the 21st century. Elsevier Inc.

Palmer J. 2002. Website usability, design and performance metrics. Information Systems Research, vol. 13 issue 2. June, 151-167.

Sheth J. & Sisodia R. 1999. Revisiting Marketing's Lawlike Generalizations. Bentley College. Journal of the Academy of Marketing Science, January 1.

Simon, H. 1987. The Steam Engine and the Computer: What Makes Technology Revolutionary. EDUCOM Bulletin vol. 22 issue 1, 2-5.

Steckler, A., McLeroy, K.R., Goodman, R.M., Bird, S.T., McCormickm L. 1992. Toward Integrating Qualitative and Quantitative Methods. Health Education Quarterly 19, 1-8.

Vargo, S. & Lusch, R. 2004. Evolving to a New Dominnant Logic for Marketing. Journal of Marketing 68, 1-17.

Woolley, S. 1998. I got it cheaper than you. Forbes, 2nd November, 82.

APPENDIX

SEOMoz Research

This Appendix includes a comprehensive overview of the results of SEOMoz's research. The research carried out by SEOMoz involved finding out the most important positive and negative factors in SEO. From all of the factors, we decided to only take the most important 5 positive factors in SEO. This was done in order to limit the research and discover what the most important factors entailed. This limitation was done in order to make our research feasible. Also, when the most important factors are taken into consideration while optimizing a web page for the Google search engine, the other less important factors are carried out at the same time. This is due to the fact that the less important factors are often closely linked to the more important factors. Subsequently, when performing the most important factors, the other factors are completed along the way.

Below are the results of the most important factors of SEO. The ranking system is from 1 – 5, with 5 being the highest possible rating for a factor.

Keyword Use in Title Tag

(placing the targeted search term in the title of the web page's header)

Ranked as Exceptional Importance (**4.9**)

According to Andy Hagans, who has been a specialist in the SEO world since 1999, states that the title has been the most constant important on page factor for SEO.

Christine Churchill also supports this statement by saying: "If you only have time to do one SEO action on your site, take the time to create good titles." Although not all the respondents agree that it is of exceptional importance, they all claim that it is of high or relatively high importance. Therefore, it can be concluded that the keyword in the title should be considered as one of the main factors in SEO.

Keyword Use in Body Text

(placing the targeted search term in the text of the page)

Ranked as High Importance (**3.7**)

Although the using the keyword in the body text got an average rank of high importance, there were some disagreements that it directly is considered as of high importance. Russ Jones, states that it is better to have the keyword in the body text but it is

of hardly any value. Guillaume argues that although the keyword use in the body text is not have that great importance in itself, it becomes relevant in terms of how long users stay on the page and therefore influences SERPs greatly because Guillaume believes strongly that a website with traffic will have a strong position in Google Ranking.

Keyword Use in Header 1 Tag

(placing a Header 1 tag with the targeted search term)

Ranked as High Importance (**3.3**)

Russ Jones and Thomas Bindl both firmly agree that it is the second most important on page criteria, while Guillaume and Todd Malicoat have high doubts of the weight h1 tags carry. Marcus Tandler gives a more diplomatic view, claiming that it is a big helper to place keywords in the h1 tag when used properly and not too often across the page. As in all cases when using the keyword in the page, it is better to make the content relevant and understandable rather than flood the page with the keyword.

Keyword Use in Domain Name

(placing the targeted term in the registered domain name)

Ranked as Moderate Importance (**3**)

Most of the respondents believe that it does not have the importance that it once did, yet it does help the people understand what the website is about and it plays a good role in click through rate because the keywords in the url are highlighted and are generally noticed by search engine users. Roger Montti and Natasha Robinson say that other search engines place much higher importance on the (URL) domain name.

Keyword Use in Alt Tags and Image Titles

(placing target keywords in Alt tags and image titles)

Ranked as Moderate Importance (**2.6**)

In terms of image search, it is of high importance, on the other hand, some of the respondents position their opinions on the fact that it should not really make a large difference and are not in agreement with those who gave a high rating for the keyword use in alt tags and image titles. Todd Malicoat, defends his position by saying that images that are linked have their keywords used as anchor text and even claims that it is often overlooked by many because the results are not seen always directly in search engine rankings.

Keyword Use in Meta Description Tag

(placing keywords in the meta description of the website)

Ranked as Moderate Importance (2)

The consensus is that it is useful for CTR on SERPS. Russ Jones states that bad descriptions can kill a page. As a majority of the respondents have stated, the notion that although the meta descriptions do not get a web page ranked higher in Google, they do however, increase click through rate which then influences the organic position of the webpage on the Google ranking system.

Link Popularity within the Site's Internal Link Structure

(the number and the importance of internal links pointing to the target page)

Exceptional Importance (4)

Scottie Claiborne is quick to point out that the internal linking and structure of a site is one of the most overlooked aspects in optimization. Barry Welford claims that they are only slightly less important than comparable links from external web pages. In terms of the page attributes, link popularity within the site's internal link structure ranks as more important than the quality and relevance of links to external sites.

Quality/Relevance of Links to External Sites/Pages

(links on the page pointing to high quality, topically-related pages)

Ranked as High Importance (3.5)

This factor seems to have risen in significance over the last few years. It is believed that where the website is linked to say a lot about what the topic and web page is about. Quality is important but it has been an overused method.

Age of Page

(Older pages may be perceived as more authoritative while newer pages may be more temporally relevant)

Ranked as High Importance (3.4)

Aaron Wall considers old pages to be more trusted, if they do not have any broken links. New pages and sites will rank well only for their freshness and relevance.

Amount of Indexable Text Content

(Refers to the literal quantity of visible HTML text on a page)

Ranked as High Importance (3.2)

It is mostly agreed that there lies importance in having a certain amount of text so that the content can be indexed. Chris Boggs claims that the old rule was 200 words but now 75-100 words can be effective if they are supported by other pages.

Quality of the Document Content (as measured algorithmically)

(Assuming search engines can use text, visual or other analysis methods to determine the validity and value of content, this metric would provide some level of rating)

Ranked as High Importance (3.0)

Although this ranked high, it was a highly disputed. While Neil Patel claims to believe in the old saying “content is king”, Thomas Bindl and Ben Pfieffer say that they could not see the effect.

Frequency of Updates to Page

(The number and time frame of changes made to the document over time)

Ranked as Moderate Importance (2.4)

Fresh content ranks well for a while, however, Eric Ward claims that he has a page that he has not touched in 8 years and it still ranks #1 for its key words. Caveman also reiterates this tone by saying that freshness is over-rated and one should only make legitimate updates. Because Google updates its index very often, freshness is a good way to stay on top in the short run.

Global Link Popularity of Site

(The overall link weight/authority as measured by links from any and all sites across the web (both link quality and quantity)

Ranked as Exceptional Importance (4.4)

Global link popularity of a site was one the top ranked as most agree to the assumption that overall link popularity has a great effect on rankings.

Age of Site

(Not the date of original registration of the domain, but rather the launch of indexable content seen by the search engines (note that this can change if a domain switches ownership))

Ranked as Exceptional Importance (4.1)

This is considered to be a big factor in competitive ranking fields. Lucas Ng states that old sites are tremendously respected by Google. Older sites can get away with more to a certain extent and better retain their rankings as search engines such as Google trust them more than young sites.

Topical Relevance of Inbound Links to Site

(The subject-specific relationship between the sites/pages linking to the target page and the target keyword)

Ranked as High Importance (3.9)

Inbound links to a site is important, and because algorithms try to make sure that the site is ranked according to its relevance, the topical relevance of an inbound link becomes important. Marcus Tandler prophesizes about a time when this will begin to hold even more importance than it does currently.

Link Popularity of Site in Topical Community

(The link weight/authority of the target website amongst its topical peers in the online world)

Ranked as High Importance (3.9)

There is a standard agreement amongst the respondents in terms of the importance of link popularity of the site in topical communities. There is also a subtle harmony amongst the respondents that link popularity is of great important and that having popular sites linking to the site must have a very positive effect on rankings.

Rate of New Inbound Links to Site

(The frequency and timing of external sites linking in to the given domain)

Ranked as High Importance (3.5)

New links are seen as good and Google has been known to place significance in fresh links to the site as it indicates that the content of the site is still worthwhile. Guillaume says that having new links proves that the site will have long term credibility.

Anchor Text of Inbound Link

Ranked as Exceptional Importance (4.4)

The anchor text of an inbound link received a very high consensus as being very important factor in search engine optimisation. Marcus Tandler considers anchor text as still the single most important factor, while Arron Wall claims that over the past year

due to attacks such as Google bombing, Google has moved away from anchor text and now places domain authority and number of quality citations as more important.